

**FACTORS INFLUENCING OF RURAL TEACHERS' INTENTION
AND BEHAVIOR TO USE DIGITAL EDUCATION PLATFORM
RESOURCES IN CHINA :AN EXTENDED UTAUT2**



**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
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Dissertation Title	Factors Influencing of Rural Teachers' Intention and Behavior to Use Digital Education Platform Resources in China Based on UTAUT2 Model
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ABSTRACT

The rapid development of digital education platforms in China has highlighted disparities in adoption among rural teachers, who are pivotal to equitable resource distribution. Despite the proliferation of such platforms, limited research integrates the UTAUT2 model with perceived trust, teacher innovativeness, and TPACK (Technological Pedagogical Content Knowledge) to examine rural educators' behavioral intentions. This study aims to empirically investigate rural teachers' intention and behavior to use digital education platforms by extending the UTAUT2 framework with perceived trust, innovativeness, and TPACK constructs.

A cross-sectional survey was conducted with 612 rural teachers across six Chinese regions. The questionnaire measured 11 latent variables (e.g., performance expectancy, trust) via 30 observed indicators. Data were analyzed using confirmatory factor analysis (CFA) and structural equation modeling (SEM) to validate the proposed model. To examine rural educators' behavioral intentions, Performance Expectation (PE)、 Effort Expectation (EE) 、 Facilitating Conditions (FC) Hedonic Motivation (HM) 、 Perceived Trust、 TPACK Ability have a positive effect on the intention of teachers to use digital education platforms ($\beta = 0.139-0.284, p < 0.05$). While, Social Influence (SI)、 Teacher Innovativeness (TI) has no positively affect on the intention of teachers to use digital education platforms ($\beta = 0.120- 0.147, p \geq 0.05$). Facilitating Conditions (FC) 、 Perceived Trust

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(PT)、 Intention to Use (ITUE) has a positive effect on the behavior of teachers to use digital education platforms($\beta = 0.247-0.530, p < 0.01$).Intention to Use(UI) has no positively mediates the effect of perceived trust on behavior to use digital education platforms.($\beta = 0.111, p > 0.05$).There are a positive moderation in PE、 EE、 SI、 FC、 HM among teachers of different genders、 teaching experience,culture significantly moderates SI and FC (positive), and EE and HM (negative), but does no positively moderates PE.

Theoretically, this research advances UTAUT2 by incorporating context-specific factors (trust, TPACK) for rural settings. Practically, it offers actionable insights for platform designers (e.g., enhancing usability) and policymakers (e.g., targeted teacher training).The study's regional focus may limit generalizability; future work could employ longitudinal designs to capture adoption dynamics.



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CHAPTER 1

INTRODUCTION

1.1 Background and Significance

1.1.1 Background

1.1.1.1 Digital Education Is Becoming An Important Development Trend of National Education and Digital Education.

As a fundamental pillar of educational informatization, the development and utilization level of digital educational resources significantly influences the advancement of educational modernization. In the context of basic education, digital teaching resources serve as a crucial mechanism for addressing educational equity between urban and rural areas while facilitating the collaborative construction and sharing of high-quality educational information resources.(Liu, 2019).In recent years, the Chinese government has placed significant emphasis on the critical role of developing and utilizing digital educational resources in advancing educational equity.At the 2023 World Digital Education Conference, Huai Jinpeng emphasized the Chinese government's strong commitment to advancing digital education. Through persistent efforts over the years, China has witnessed remarkable progress in educational informatization. The national smart education public service platform, developed by China, currently stands as the world's most extensive digital education resource platform(Huai, 2024).According to the latest statistical report from the China Internet Network Information Center, China's internet user population reached 1.079 billion by June 2023, representing a net increase of 11.09 million since December 2022 and achieving a national internet penetration rate of 76.4%.(The China Network Information Center, 2024, p. 53).Confronted with the vast online learning market, leading platforms have introduced complimentary courses and implemented blended learning approaches, propelling the online education industry into a phase of rapid expansion. Digital education has emerged as a significant developmental trajectory in numerous countries' educational digitization efforts.

1.1.1.2 Platforms Can Promote Educational Equity

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In 2021, the Ministry of Education along with five other governmental agencies established instructional guidelines for educators, mandating the integration of digital educational resources as a fundamental component of pedagogical practice (Ministry of Education, 2021). As the cornerstone of educational informatization, the development and utilization standards of digital education platform resources directly influence the modernization progress of education (Liu, 2019). Digital teaching resources in basic education can effectively address educational disparities between urban and rural areas while facilitating the co-creation and equitable sharing of high-quality educational materials. This advantage stems from the replicability and shareability of digital resources, enabling their seamless dissemination across different regions and institutions - a critical requirement for China's ongoing basic education informatization efforts (Huang, 2015). The Ministry of Education's 2012 Decade Development Plan for Education Informatization (2011-2020) explicitly emphasized the need to reduce the digital divide in basic education and enhance the sharing of high-quality educational resources. Within the context of educational policies and practical conditions, the significance of developing and utilizing digital education resources has garnered widespread attention (H. Cai & Chen, 2019).

1.1.1.3 It is necessary to improve the use level of digital education platforms by rural teachers

China's uneven economic development has resulted in significant educational disparities among schools and between urban-rural regions. While the nationwide implementation of digital education platforms has demonstrated some effectiveness in enhancing rural school instruction quality, evolving social demands continue to raise increasingly higher expectations for these resources (Wang, Wu & Zhai Yajuan., 2018). While digital technologies are not universally adopted by all educators, only those with adequate technological proficiency effectively utilize them as valuable pedagogical tools and consistently integrate them into classroom instruction (Miranda & Russell, 2012). Significant disparities persist between rural and urban schools, particularly regarding the development of information-based teaching environments and digital education resource services. To address this challenge, the "Digital Education Resource Full Coverage" initiative was implemented (Lu, Yin, Li & Li, 2020). This

initiative primarily involves establishing essential infrastructure at teaching locations and curating premium digital resources for network-based distribution to all instructional sites(Wang, Chen, Chen& Chen, 2017).Evaluation findings from selected teaching sites reveal that despite adequate provision of information-based teaching equipment, the actual utilization of digital education resources falls below anticipated levels, primarily due to teacher-related challenges and resource type limitations(Liu, 2019).A pronounced disparity exists between rural/remote and urban educators in terms of digital education resource utilization. The current implementation status and future developmental trajectory of these resources in rural regions remain inadequately documented(Wang, Wu & Zhai Yajuan,2018).

1.1.2 Significance

1.1.2.1 Theoretical Significance

This research makes three primary contributions: First, it extends the UTAUT2 framework to examine digital education platform adoption among rural Chinese educators, thereby expanding the model's theoretical applications. Second, it systematically analyzes digital education platform components and develops a rural-specific adoption model, advancing educational informatization theory. Third, through empirical investigation of platform implementation challenges, it identifies key issues and proposes solutions, establishing a theoretical foundation for subsequent studies.

1.1.2.2 Practical Significance

This research makes three significant contributions: First, by analyzing survey data on digital education platform usage among rural Chinese teachers, it identifies key patterns in resource acquisition channels, utilization frequency, and preference trends, establishing an empirical foundation for developing basic education digital resource databases. Second, employing the UTAUT2 framework, it uncovers critical determinants affecting teachers' platform adoption, offering targeted strategies to enhance rural educators' digital resource utilization. Third, through examining high-performing cases, it formulates effective implementation pathways and provides evidence-based policy recommendations for government agencies, educational enterprises, schools, and individual practitioners to optimize digital education platforms.

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1.2 Research Questions

This study examines the factors influencing rural primary and secondary school teachers' behavioral intention and actual use of digital education platforms in China, employing an extended UTAUT2 model that incorporates Perceived Trust, Teacher Innovativeness, and TPACK Ability. The research questions are structured to systematically investigate the predictive relationships, moderating effects, model fit, and parsimony of the proposed framework.

Main Research Question (MRQ):

To what extent does an extended UTAUT2 model — incorporating Perceived Trust, Teacher Innovativeness, and TPACK — explain rural teachers' behavioral intention and use of digital education platforms in China?

This overarching question guides the investigation into how the integration of these three additional constructs enhances the explanatory power of the original UTAUT2 framework in the context of rural Chinese educators' adoption of digital education platforms.

Sub-Research Questions:

1. Predictive Relationships (Objective 1):

RQ1a: To what extent do Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Teacher Innovativeness, Perceived Trust, and TPACK Ability predict Behavioral Intention to use digital education platforms among rural teachers?

This question examines the direct effects of the eight antecedents on teachers' willingness to adopt digital platforms, addressing gaps in prior research that overlooked rural contexts and these specific variables.

RQ1b: To what extent does Behavioral Intention predict Use Behavior among rural teachers?

This tests the foundational assumption of technology acceptance models that intention directly drives actual usage, particularly in resource-constrained rural settings.

RQ1c (Exploratory): Which antecedents exert the largest standardized effects on

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Behavioral Intention?

Identifies priority levers (e.g., Trust vs. TPACK) for policymakers to enhance platform adoption.

2. Moderation Effects (Objective 2):

RQ2a: Does gender moderate the relationships between the eight antecedents and Behavioral Intention?

Investigates whether male and female teachers differ in how factors like PE or Trust influence their adoption intentions.

RQ2b: Does teaching experience moderate the path from Behavioral Intention to Use Behavior and/or antecedent→Behavioral Intention paths?

Assesses if veteran teachers' adoption patterns differ from novices due to accumulated technical familiarity or resistance to change.

RQ2c: Does culture (individualism/collectivism, uncertainty avoidance) moderate key relationships in the extended UTAUT2 model (e.g., PE→BI, FC→BI)?

Explores how cultural values shape the weight teachers assign to social norms or risk perceptions.

3. Model Validation (Objective 3):

RQ3a: Does the hypothesized SEM demonstrate acceptable measurement and structural fit (e.g., CFI > 0.90, RMSEA < 0.08)?

Validates the psychometric properties of the survey instruments and the plausibility of the theoretical structure.

RQ3b: Are there significant indirect (mediated) effects from antecedents to Use Behavior via Behavioral Intention?

Tests whether intention fully or partially mediates the influence of factors like Trust on actual usage.

RQ3c (Diagnostic): What proportion of variance (R^2) in Behavioral Intention and Use Behavior is explained by the model?

Quantifies the model's explanatory power compared to baseline UTAUT2.

4. Model Optimization (Objective 4):

RQ4a: What is the most parsimonious subset of constructs/paths that maintains high

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explanatory power for Behavioral Intention and Use Behavior?

Identifies non-significant paths for potential simplification without sacrificing predictive accuracy.

RQ4b: How does the extended UTAUT2 compare with the baseline UTAUT2 in terms of model fit and R^2 for Behavioral Intention/Use?

Evaluates whether adding Trust, Innovativeness, and TPACK justifies increased model complexity.

RQ4c (Actionable Insights): Which actionable levers (e.g., improving FC vs. HM vs. TPACK training) provide the largest marginal gains in predicted adoption rates?

Guides targeted interventions by ranking antecedents by effect size and policy feasibility.

1.3 Research Hypotheses

The research hypothesis of this study are as follows:

H1: Performance Expectation has a significant positive impact on the intention of teachers to use digital education platforms;

H2: Effort Expectation has a significant positive impact on the intention of teachers to use digital education platforms;

H3: Social Influence has a significant positive impact on the intention of teachers to use digital education platforms;

H4: Facilitating Condition has a significant positive impact on the intention of teachers to use digital education platforms;

H5: Hedonic Motivation has a significant positive impact on the intention of teachers to use digital education platforms;

H6: Teacher Innovativeness has a significant positive impact on the intention of teachers to use digital education platforms;

H7: Perceived Trust has a significant positive impact on the intention of teachers to use digital education platforms;

H8: TPACK Ability has a significant positive impact on the intention of teachers to use digital education platforms;

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H9: Facilitating Condition has a significant positive impact on the behavior of teachers to use digital education platforms;

H10: Perceived Trust has a significant positive impact on the behavior of teachers to use digital education platforms;

H11: Intention to use has a significant positive impact on the behavior of teachers to use digital education platforms;

H12: Intention to use mediates the impact of perceived trust on behavior to use digital education platforms;

H13: There are differences in performance expectation, effort expectation, social influence, facilitating conditions, hedonic motivation among teachers of different genders;

H14: There are differences in performance expectation, effort expectation, social influence, facilitating conditions, hedonic motivation among teachers of different teaching experience.

H15: There are differences in performance expectation, effort expectation, social influence, facilitating conditions, hedonic motivation among teachers of culture.

1.4 Research Objectives

The main research objective is to empirically investigate the rural teachers' behavioral and intention to use digital education platform by incorporating the Integration of Perceived Trust, Teacher Innovativeness, and TPACK Ability to UTAUT2 Model. The specific objectives were:

1. To empirically determine the effects of behavioral intention to use digital education platform in China.
2. To empirically determine the moderation effect of gender, experience and culture on behavioral intention to use digital education platform in China.
3. To reveal the SEM of the conceptual framework for digital education platform resources used by rural teachers in China.
4. To develop a technology acceptance model for the behavioral intention to use digital education platform in China.

1.5 Scope of Research

1.5.1 Scope of content

This research employs the UTAUT2 model as its theoretical foundation to examine technology adoption behaviors among users. The core constructs of this model encompass performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, behavioral intention, and usage behavior. Specifically for this investigation, the original UTAUT2 framework was expanded to incorporate three additional variables: Teacher Innovativeness, Perceived Trust, and TPACK Competence. Focusing on rural educators' utilization of digital education platforms in China, this study examines the integration of these three novel variables into the UTAUT2 framework through empirical analysis. The research variables are categorized into three distinct groups: exogenous variables, endogenous variables, and moderating variables.

1.5.1.1 The Exogenous latent variables

The exogenous latent variables consisted of observed variables. They are as follows:

- (1) Performance expectation
 - A. Perceived Usefulness
 - B. External Motivation
 - C. Relative Advantage
 - E. Job-Fit
 - F. Outcome Expectations
- (2) Effort expectation
 - A. Perceived Ease of Use
 - B. Ease of Use
- (3) Social influence
 - A. General Social Influence
 - B. Peer Social Influence
- (4) Facilitating conditions
 - A. Perceived Behavioral Control

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C. System Compatibility With Individuals

- (5) Hedonic motivation
 - A. User attention
 - B. User curiosity
 - C. User Enjoyment
- (6) Teacher innovativeness
 - A. Innate Innovativeness
 - B. Domain Specific Innovativeness
- (7) Perceived trust
 - A. System quality
 - B. Relationship quality
 - C. Service quality
- (8) TPACK ability
 - A. Technological Pedagogical Knowledge
 - B. Technological Content Knowledge
 - C. Technological Pedagogical Content Knowledge
- (9) Intention to use
 - A. Intention
 - B. Prediction
 - C. Planning

1.5.1.2 The Endogenous Latent variables

The Endogenous Latent variables consisted of behavior to use.

1.5.1.3 The moderating latent variable

The moderating latent variable consisted of teaching experience、teacher gender and culture.

1.5.2 Scope of Population

This research focuses on Chinese rural educators as its target population. The study encompasses an extensive participant base, with over 100 million teachers registered on digital education platforms nationwide. The population comprises potential users of these

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platforms, including both practicing professionals and pre-service teachers. From this population, a representative sample was selected for investigation.

The research methodology employed a dual-phase approach:

Phase 1 involved a comprehensive literature review analyzing peer-reviewed journal articles, academic publications, and other authoritative sources relevant to the study.

Phase 2 consisted of primary data collection through structured questionnaires administered to the selected sample population, yielding quantitative results for analysis.

1.5.3 Scope of Sample

The sample selection was conducted among academic institutions specializing in social sciences and information technology disciplines. Following established methodological standards (Hair, Ringle, & Sarstedt, 2011), this study maintained five respondents per analyzed variable as the minimum requirement, while adopting the recommended 20:1 ratio (20 participants per variable) as the optimal parameter. Consequently, given the research's 30 measured variables, the predetermined sample size was established at 600 cases (20×30 variables). Nevertheless, following data collection and validation procedures, the final sample size surpassed the initially projected national target.

1.5.4 Scope of Time

This research was conducted over a three-year period, encompassing ethical review board approval, primary data acquisition, analytical processing, manuscript preparation, and final revisions incorporating all supervisory feedback. The primary data collection phase occurred specifically during July-August 2024.

1.6 Research Tools

The research tools of this study are two tools: questionnaire design.

1.7 Study Benefits

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This study makes three principal contributions to the field: First, it represents the inaugural systematic investigation into behavioral determinants influencing digital education platform adoption in China. Second, it pioneers comprehensive examination of rural educators' utilization patterns of digital education resources. Third, it establishes a practical framework for enhancing digital education platforms in China's rural regions.

1.8 Definition of Terms

Performance Expectation (PE) denotes rural educators' perceived degree to which digital education platforms can enhance their professional effectiveness, encompassing two key dimensions: operational efficiency gains and career value returns. Operational efficiency improvements specifically indicate the platform's capacity to facilitate quicker and more streamlined completion of teaching-related tasks while enhancing output quality. Career value returns principally refer to the potential for professional development, career advancement opportunities, and remuneration increases through platform utilization.

Perceived Usefulness (PU) measures the degree to which users perceive that adopting digital systems can enhance their job effectiveness, specifically through facilitating task completion, boosting work efficiency, increasing output quality, and supporting professional activities.

External Motivation (EM) captures an individual's propensity to utilize technological solutions based on anticipated beneficial outcomes, particularly the expectation that such adoption may lead to measurable professional gains including enhanced job performance, career advancement opportunities, or financial remuneration.

Relative Advantage (RA) represents the perceived superiority of adopting specific information technologies compared to alternative methods, manifested through enhanced task completion speed, improved work quality and efficiency, and overall productivity gains.

Job-Fit (JF) indicates the alignment level between technological solutions and professional responsibilities, measured by their capacity to enhance work outcomes, increase output quantity, and optimize operational efficiency, ultimately demonstrating the technology's overall utility for job performance.

Outcome Expectations (OE) captures the anticipated professional benefits and personal objectives derived from technology adoption that fulfills task requirements, encompassing time savings, enhanced efficiency and output quality, productivity gains, skill development, and improved prospects for recognition and compensation advancement.

Effort Expectation (EE) measures rural educators' perceived difficulty level associated with digital platform implementation, comprising both the challenges of resource accessibility and the complexity of platform application in educational settings.

Perceived Ease of Use (PEU) represents an individual's assessment of a system's user-friendliness, reflecting the minimal cognitive and operational effort required for effective technology adoption, including system navigation, technical communication, and skill acquisition.

Ease of Use (EOU) denotes users' subjective evaluation of technological complexity, encompassing the intuitiveness of system operation, comprehensibility of functions, and overall learning curve associated with innovation adoption.

Social Influence (SI) comprises two key dimensions: (1) institutional credibility - incorporating platform reputation, administrative effectiveness, and technological innovation; and (2) environmental endorsement - involving perceived validation from significant others (administrators, peers, and experts) regarding platform adoption within educational settings.

General Social Influence (GSI) captures the normative pressure exerted by institutional stakeholders and significant others who endorse the adoption of digital education resources within professional contexts.

Peer Social Influence (PSI) reflects the subjective social norms established through colleagues' and peers' expectations regarding digital platform utilization in educational practice.

Facilitating Conditions (FC) encompasses both institutional provisions (technological infrastructure including computing devices and network connectivity) and platform characteristics (instructional quality, interface design, and supplementary educational materials) that collectively enable effective technology integration.

Perceived Behavioral Control (PBC) represents rural educators' assessment of both personal and environmental factors influencing technology adoption, including operational

proficiency, resource availability, and technical accessibility. This encompasses possession of system documentation, requisite technical knowledge, and comprehensive platform mastery.

Facilitating Conditions (FF) denotes the extent of technological integration enabled by contextual factors, comprising hardware provisions, instructional manuals, and dedicated technical support personnel within educational settings.

System Compatibility (SCI) measures the congruence between technological innovations and educators' professional contexts, evaluating alignment with work routines, information needs, and prior experience, while ensuring harmony with job responsibilities and established work methodologies.

Hedonic Motivation (HM) captures rural educators' affective evaluation of digital platform engagement, encompassing both the platform's capacity to enhance classroom dynamics and positively influence student learning engagement.

User Attention (UA) describes the cognitive state wherein educators' focus remains selectively attuned to system interaction while attenuating environmental distractions during technology-mediated instruction.

User Curiosity (UC) reflects the intellectual stimulation prompting educators to persistently investigate system functionalities during technological engagement.

User Enjoyment (UE) measures the intrinsic satisfaction derived from system interaction itself, independent of contextual factors in the educational environment.

Teacher Innovativeness (TI) encompasses educators' predisposition toward adopting novel digital education technologies, comprising both inherent psychological traits (Innate Innovativeness) and field-adapted adoption tendencies (Domain-Specific Innovativeness).

Innate Innovativeness (II) represents users' fundamental psychological orientation toward technological adoption, manifesting as stable individual differences in innovation receptivity, cognitive processing, and behavioral patterns regarding digital education platforms.

Domain-Specific Innovativeness (DSI) indicates educators' likelihood of recognizing and embracing digital resources within specific platform contexts, reflecting specialized adaptation to particular educational technology environments.

This manuscript is protected by copyright. All rights reserved. Perceived Trust (PT) captures educators' confidence in digital education platforms,

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evaluated through three key dimensions: system reliability, interaction effectiveness, and service excellence that collectively establish platform trustworthiness.

System Quality (SQ) measures instructors' assessment of platform performance characteristics, particularly operational speed, interface fluidity, and overall user experience quality.

Relationship Quality (RQ) evaluates the communication efficacy enabled by the platform, specifically examining interaction quality between educators and learners within the digital environment.

Service Quality (SEQ) assesses the perceived value and authenticity of platform-provided content, reflecting both the credibility of educational resources and their practical utility for teaching purposes.

TPACK Competence represents educators' capacity to effectively integrate technological tools to enhance both pedagogical approaches and student learning outcomes. This multidimensional construct comprises three interrelated components.

Technological Pedagogical Knowledge (TPK) encompasses instructors' proficiency in utilizing digital tools to assess learner progress and adapt instructional strategies to meet the demands of technology-mediated education.

Technological Content Knowledge (TCK) denotes educators' ability to leverage technological resources to facilitate deeper subject matter understanding and knowledge acquisition.

Technological Pedagogical Content Knowledge (TPCK) reflects the synthesized expertise in selecting and implementing appropriate digital solutions that simultaneously optimize instructional delivery, teaching methodologies, and student learning experiences.

Culture represents the shared cognitive framework that differentiates members of specific social groups through distinct value systems and behavioral patterns.

Intention to Use (ITUE) captures rural educators' predisposition to employ digital platforms throughout instructional processes (pre-, during, and post-teaching), anticipating professional efficiency gains, career value enhancement, and knowledge acquisition.

Planning to Use (PLTU) indicates educators' deliberate commitment to consistently utilize digital education resources regardless of situational constraints.

Prediction to Use (PTU) reflects instructors' self-projected likelihood of ongoing digital resource utilization in their professional practice.

Behavior To Using (BU) measures educators' actual engagement with digital platforms, including resource acquisition, information retrieval, content navigation, and course consultation activities.

Uncertainty Avoidance (UA) assesses individuals' risk propensity thresholds, influenced by factors including regulatory compliance, occupational flexibility, and conventional practice adherence.

Individualism/Collectivism (IC) captures the psychological orientation prioritizing either personal objectives over collective goals or collaborative approaches over independent actions in professional contexts.

Using Experience (UEX) quantifies educators' engagement patterns with digital platforms through both temporal duration and interaction frequency metrics.

Using reaction (UR) encompasses post-adoption evaluations, behavioral responses, and platform recommendations provided by educators following digital resource utilization.

CHAPTER 2

LITERATURE REVIEW

2.1 Theoretical Concept of The Study

2.1.1 Definition of Intention to Use

Academic researchers across different regions have examined using intention through varied theoretical frameworks (see Table 2.1). In this study, using intention is defined as a consumer's propensity and likelihood to adopt a specific product, influenced by the interplay of internal psychological factors and external contextual conditions. This construct serves as a predictive measure for individuals' actual usage behavior.

Table.2.1 Definition table of the intention to use

Sources	Definition of the Intention to Use
(Ajzen & Fishbein, 1975)	User behavior is often influenced by their affective evaluations and personal impressions of a product or service.
(Zeithaml, 1988)	A user's behavioral intention toward a product can be classified as either positive or negative. When a preference exists, the likelihood of adoption increases (positive intention); conversely, aversion leads to diminished usage propensity (negative intention).
(Zhu,Huang&Lu., 1985)	Product awareness and acceptance constitute primary antecedents of behavioral intention, thereby functioning as critical determinants of subsequent adoption behavior.
(Negm, 2022)	This research operationalizes intention within the context of educational IoT systems designed for online learning environments. The study investigates how higher education students' technological readiness influences their adoption intentions toward these IoT-based learning platforms.

The notion of using intention originates from the psychological construct of behavioral intention, which represents an individual's preparatory state for action—a measurable

propensity to respond to specific stimuli. Behavioral intention manifests in various forms, including repurchase intention, purchase intention, and using intention. In the present research, using intention specifically captures consumers' psychological predisposition toward adopting a particular service or product. This cognitive construct reflects the subjective likelihood that users will elect to engage with a given offering, effectively quantifying their willingness to utilize it.

2.1.2 Definition of Digital Education Resources

2.1.2.1 Digitization

Digitalization is widely recognized as an inevitable outcome of advancing information and communication technology (ICT). Scholars such as Wang Haichang define it as the process of converting diverse forms of information into quantifiable digital data, which are then utilized to construct computational models. These models are subsequently encoded into binary systems for computer processing—a methodology valued for its efficiency and rapid data transmission capabilities (Wang, 2009). Similarly, he conceptualizes digitalization as the automated computer-based processing of symbolic data (including text, images, and other media formats) for networked communication and information exchange (Zhang, 2010). These perspectives collectively position digitalization as a core ICT paradigm, characterized by the technological conversion and digital representation of information through devices like computers and smartphones. The resulting digitized information possesses distinct technical attributes. As digitalization permeates various societal systems, its integration with education has rendered the digital transformation of educational resources unavoidable. Consequently, the digital nature of educational resources constitutes their foundational characteristic, distinguishing them from traditional learning materials.

2.1.2.2 Educational Resources

The Education Dictionary provides a dual conceptualization of educational resources. From an educational economics standpoint, these resources - alternatively termed "educational economic conditions" - encompass three fundamental components: human capital (including both teaching professionals and learners), physical assets (comprising institutional infrastructure, equipment, and consumables), and financial allocations

(representing the monetary valuation of human and material inputs). The optimal utilization of these resources and enhancement of their economic efficiency constitutes a central research focus in educational economics (Gu, 1998).

Alternatively, the term may denote accumulated pedagogical knowledge, historical educational data, and relevant instructional information. As essential prerequisites for effective teaching implementation, educational resources serve dual functions: providing foundational support for instructional delivery and enhancing pedagogical outcomes. In conventional usage, the concept predominantly refers to tangible teaching materials and didactic information - a conceptual framework that proves particularly relevant when examining digitized educational resources. This conventional understanding establishes the theoretical basis for investigating the digital transformation of educational materials.

2.1.2.3 Digital Education Resources

The emergence of digital education resources can be traced back to 1996, when researchers at the National Education Library (NLE) identified a significant challenge: while the internet contained vast amounts of educational materials, these resources were poorly organized and difficult to access. Although the formal academic concept of digital education resources had not yet been established at that time, the digital transformation of educational materials was already evident, revealing substantial untapped potential in this emerging field. As shown in Table 2.2, various definitions of digital education resources have been proposed by different scholars in subsequent years.

Since these initial observations, research on digital education resources has expanded rapidly. Nevertheless, the academic community has yet to reach a consensus on a unified definition of what constitutes digital education resources. The lack of standardized terminology reflects both the dynamic nature of digital education and the diverse perspectives from which researchers approach this evolving field.

Table.2.2 Definition table of the digital education resources

Sources	Definition of the digital education resources
(Saliyeva,Zhumabekova,	The instructional materials essential for facilitating student learning processes include multimedia resources (photographs,

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Sources	Definition of the digital education resources
Kashkynba, Saurbekova,, Tauasarova, Toktarbaev,& Sakenov, 2016)	video recordings, infographics), audio-visual archives, textual documents, and supplementary didactic materials.
(Ribeiro & Gil, 2016)	This digital modality has emerged as a pedagogically significant complement to traditional textbooks in contemporary education. Encompassing multimedia formats (textual documents, visual media, audio recordings, and video content), it serves as both an instructional facilitator and catalyst for pedagogical innovation, while simultaneously enhancing learner engagement.
(Morais,Miranda& Alves , 2014)	These constitute purpose-built digital educational assets, specifically developed to enhance pedagogical processes. They encompass both dedicated learning applications and systematically organized digital resource repositories designed to optimize knowledge acquisition.
(Fernández-Pampillón, 2017)	This digital learning object is characterized by defined pedagogical objectives and is typically housed within an institutional digital repository. Such repositories enable optimized resource discovery and selection of relevant educational materials.
(Wang Min, 2014)	These constitute purpose-built digital educational resources, intentionally designed for pedagogical applications, or alternatively, digital assets possessing inherent educational utility that can be repurposed for learning objectives.
(Yang,2014)	This encompasses a range of digital learning resources, including but not limited to: digital video and audio content, interactive multimedia applications, web-based platforms, learning management systems (LMS), simulation software, asynchronous discussion forums, and structured educational databases.
(Yu , Chen & Wu, 2016) (Yu , Chen & Zhao, 2017)	As primary instructional content carriers, digital educational resources are fundamentally learner-centered and instructor-facing, with their service quality being a critical determinant of functional utility in pedagogical applications.
(Yang,2014)	Digital education resources exhibit three defining innovative attributes: sustainability, interactivity, and transparency. These characteristics collectively enhance resource utilization efficiency, prolong functional lifespan, and facilitate broader application and dissemination within educational ecosystems.

Sources	Definition of the digital education resources
(UNESCO,2018)	The United Nations Educational, Scientific and Cultural Organization (UNESCO) identifies open educational resources (OERs) as comprising freely accessible digital materials, including but not limited to: curricular content, instructional notes, assessment tools (homework and tests), as well as multimedia components (audio recordings and animations).

From the analysis above, it becomes evident that both digital textbooks and open educational resources represent specific manifestations of digital educational resources, sharing the common purpose of supporting teaching activities. Essentially, these two categories constitute distinct yet complementary types within the broader spectrum of digital educational resources, with digitization serving as their fundamental characteristic and defining attribute. Collectively, they encompass the complete range of digital learning materials, including both core textbooks and supplementary resources.

In conclusion, this study defines digital educational resources as the comprehensive collection of pedagogically-oriented materials that exist in digital formats, characterized by diverse content types and substantial quantity. These resources are distinguished by their inherent digital nature, which enables enhanced interactivity, transparency, and accessibility. Primary categories include digital textbooks, open educational resources, massive open online courses (MOOCs), and micro-lecture video libraries, while common formats encompass multimedia elements such as animations, textual documents, video recordings, and audio files. This conceptualization emphasizes the transformative potential of digital technology in education while maintaining focus on pedagogical applications.

2.1.3 Definition of Digital Education Resource Platform

The term "platform" carries multiple definitions in the Chinese Dictionary, including: (1) single-story houses; (2) elevated terraces or structures; and (3) temporary work platforms used in construction (Chinese Dictionary Network, 2019). However, with the proliferation of internet technology and the advent of the information age, the concept of "platform" has evolved to encompass a new digital dimension - referring specifically to websites (Michael

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Hayette, 2013). Consequently, in its broadest sense, a digital education resource platform can be understood as any web-based portal that hosts and delivers digital learning materials.

This expanded definition reflects the technological transformation of the term, where physical structures have given way to virtual spaces for educational resource sharing and dissemination. The digital education platform thus represents the convergence of traditional educational materials with modern information technology, creating new possibilities for teaching and learning in the internet era.

A digital education platform represents an Internet-based educational system designed to deliver digital learning resources and create virtual learning environments. These platforms have emerged through natural selection in the competitive education market. Conceptually, they can be categorized broadly and narrowly: the broad definition encompasses any web-based service providing educational resources, while the narrow definition specifically refers to technology-enhanced learning platforms including "online education platforms," "open education platforms," and "web-based education platforms" - all utilizing Internet technologies to construct digital learning ecosystems.

Currently, the academic community lacks a standardized definition for digital education platforms (see Table 2.3 for existing resource definitions). For this study, the operational definition has been developed through comparative analysis of related concepts, particularly focusing on platforms that integrate: (1) structured digital resource repositories, (2) interactive learning environments, and (3) web-based delivery mechanisms. This conceptualization emphasizes the platform's dual role as both content provider and virtual learning space facilitator.

Table.2.3 Definition table of the digital education resource platform

Sources	Definition of the digital education resource platform
(Matei & Vrabie, 2013)	This modality represents a technologically-mediated learning paradigm, characterized by either CD-ROM or internet-based delivery systems, which fundamentally differentiates it from conventional education through its distinctive media utilization framework.

Sources	Definition of the digital education resource platform
(Gang, 2008)	A critical component of platform development involves comprehensive user needs analysis. The platform's defining characteristic is its interactive openness, which facilitates multi-modal, location-independent resource sharing among users.
(Zhang Min, Zhu An, Zhang Fang, 2020)	The online education sector exhibits four defining attributes: early market entry, broad demographic reach, significant operational scale, and demonstrated pedagogical efficacy. Longitudinal sustainability in this domain is contingent upon persistent user adoption and engagement. This framework establishes user-centricity as the foundational paradigm for digital education platforms, where sustained viability is directly correlated with enhanced user retention metrics.
(Zhang Zuowei, 2014)	Through strategic integration of premium content providers, diversified digital education e-commerce platforms synthesize heterogeneous educational resources, thereby constructing an ecosystem characterized by strong network aggregation and user retention.
(Li Lan, 2020)	A digital education platform represents a profitable educational model that operates independently from the national public service platform for educational resources. It delivers high-quality digital learning materials and services to users through specialized commercial offerings.

With the increasing recognition of digital education resource platforms' benefits, their operational models have diverged into two distinct categories based on financial objectives: commercial (profit-oriented) and public (non-profit) platforms. While some developers have capitalized on these platforms as revenue-generating tools, this study specifically focuses on non-commercial implementations. The research examines platforms that prioritize educational accessibility over financial gain, aligning with the public service orientation of digital education development.

This distinction is particularly important as it reflects fundamental differences in platform design objectives, resource allocation mechanisms, and user engagement strategies. Non-profit platforms typically emphasize open access, equitable resource distribution, and pedagogical effectiveness rather than monetization strategies, making them more suitable for investigating the educational potential of digital resources without commercial interference.

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2.1.4 Definition of Rural Teachers

Teachers represent professionally trained educators dedicated to cultivating qualified social talents through systematic instruction in academic knowledge and moral development (Peng, 1989). According to China's Teachers Law, they are formally defined as educational professionals who fulfill teaching responsibilities, implement the mission of educating students, and contribute to developing socialist builders while enhancing national educational quality (MOE, 2021).

Conceptually, teachers can be understood through dual perspectives: broadly encompassing all knowledge transmitters, and narrowly referring to institutionally-trained professionals engaged in formal school education (Department of Education, Nanjing Normal University, 2015). These definitions collectively emphasize teachers' fundamental role in knowledge dissemination and moral guidance.

For this research, the narrow definition is adopted, specifically focusing on certified educators working within formal school systems. This operational definition allows for precise examination of teachers' professional practices in institutional educational settings, while excluding informal or non-specialized knowledge providers. The study thus concentrates on teachers' pedagogical functions within structured learning environments where specialized training and formal curricula are implemented.

The concept of less developed areas represents a relative designation, referring to regions that demonstrate economic disadvantages when compared with more prosperous areas. These disparities primarily stem from multiple factors including geographical constraints, outdated development concepts, policy limitations, and historical legacies (Zhu, 2020). In the Chinese context, this term currently refers predominantly to national-level poverty counties marked by economic backwardness. While recent years have witnessed growth in per income within these regions, many continue to struggle with persistent poverty.

Educational informatization development in these areas faces particular challenges due to constrained financial resources. As noted by (Yang, 2020), the primary funding for education informatization originates from provincial and municipal education budgets, making progress heavily dependent on local socioeconomic conditions. This financial dependency creates significant obstacles for less developed regions in advancing their

educational technology infrastructure(Chen, 2020).

For this study's purposes, rural educators in less developed areas were identified through a targeted sampling approach. Initial contact was established with school administrators in these regions, who then facilitated connections with additional teachers. This snowball sampling method ensured the research subjects possessed representative characteristics of educators working in underprivileged educational environments, while maintaining the study's focus on authentic rural teaching contexts. The methodology specifically targeted teachers facing the dual challenges of resource limitations and technological constraints typical of less developed areas.

2.2 The Related Research Theories of The Study

2.2.1 The Theories of Technology acceptance

2.2.1.1 Theory of Reasoned Action(TRA)

The Theory of Reasoned Action (TRA) was the first intention-based theory to be empirically validated. According to this theory, individuals' behavioral intentions are primarily shaped by two key factors: their attitudes toward the behavior and subjective norms (social pressures). Furthermore, actual user behavior can be predicted based on behavioral intentions, demonstrating the theory's predictive validity. (Ajzen & Fishbein, 1975).

2.2.1.2 Theory of Planned Behavior(TPB)

The Theory of Planned Behavior (TPB) posits that an individual's behavior is not solely determined by personal motivation but is also influenced by non-motivational factors, such as skills, time, and resources. To account for these constraints, the model incorporates Perceived Behavioral Control as an additional determinant, thereby extending the Theory of Reasoned Action (TRA)(Ajzen, 1991)(see figure2.1).

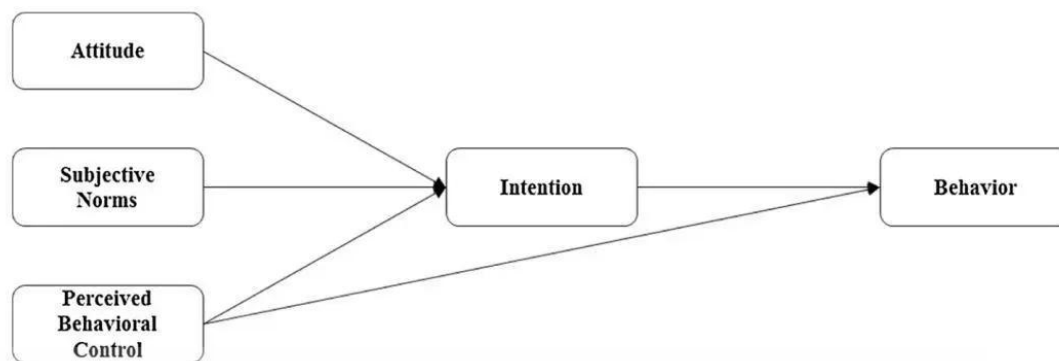


Figure.2.1 The theoretical model of the planned behavior

Source:(Ajzen, 1991)

2.2.1.3 Technology Acceptance Model(TAM)

The Technology Acceptance Model (TAM), derived from the Theory of Reasoned Action (TRA), examines user acceptance of information technology systems (Davis, 1989). According to TAM, an individual's behavioral intention to adopt an IT system is primarily influenced by two key factors: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived Usefulness (PU) refers to the extent to which users believe that utilizing a particular technology will enhance their job performance.

Perceived Ease of Use (PEOU) reflects the degree to which users perceive the technology as effortless to operate.

These two factors collectively shape attitudes toward technology adoption, with PEOU also exerting a direct influence on PU. However, TAM operates under the assumption that behavior is solely governed by individual intention, implying that once intention is formed, no external constraints impede actual usage. In reality, user behavior is often subject to organizational, temporal, and situational limitations, revealing the model's inherent constraints (Gao Feng, 2009).

Furthermore, TAM posits that actual IT system usage is determined by the user's behavioral intention, though this relationship may be moderated by external factors in practical settings(see figure2.2).

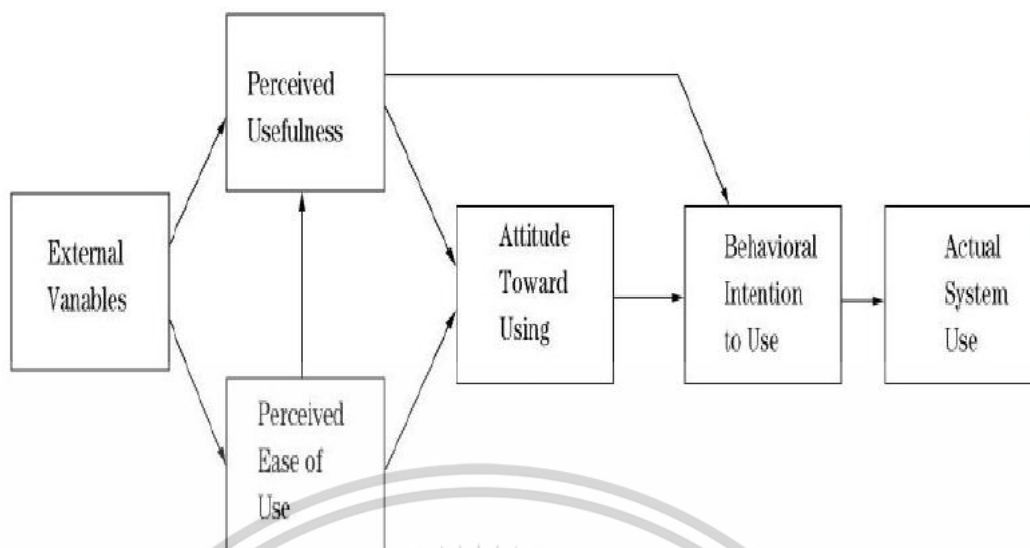


Figure.2.2 Technology Acceptance Model
Source:(Davis, Bagozzi& Warshaw, 1989)

2.2.1.4 Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT)(Venkatesh, Morris, Davis& Davis,2003) (see Figure 2.3) is an integrative framework that synthesizes elements from the Technology Acceptance Model (TAM) and the Theory of Reasoned Action (TRA). This model identifies four key determinants of users' behavioral intention to adopt technology:

Performance Expectancy (PE): The degree to which individuals believe that using a technology will enhance their job performance.

Effort Expectancy (EE): The perceived ease associated with the use of the technology.

Social Influence (SI): The extent to which users perceive that significant others (e.g., peers or supervisors) believe they should use the technology.

Facilitating Conditions (FC): The degree to which individuals perceive that organizational and technical infrastructure exists to support technology use.

These four core constructs are derived from consolidated variables across multiple prior theoretical models (Huang Jiong, 2007). UTAUT provides a comprehensive framework for understanding technology adoption by integrating these influential factors into a unified model.

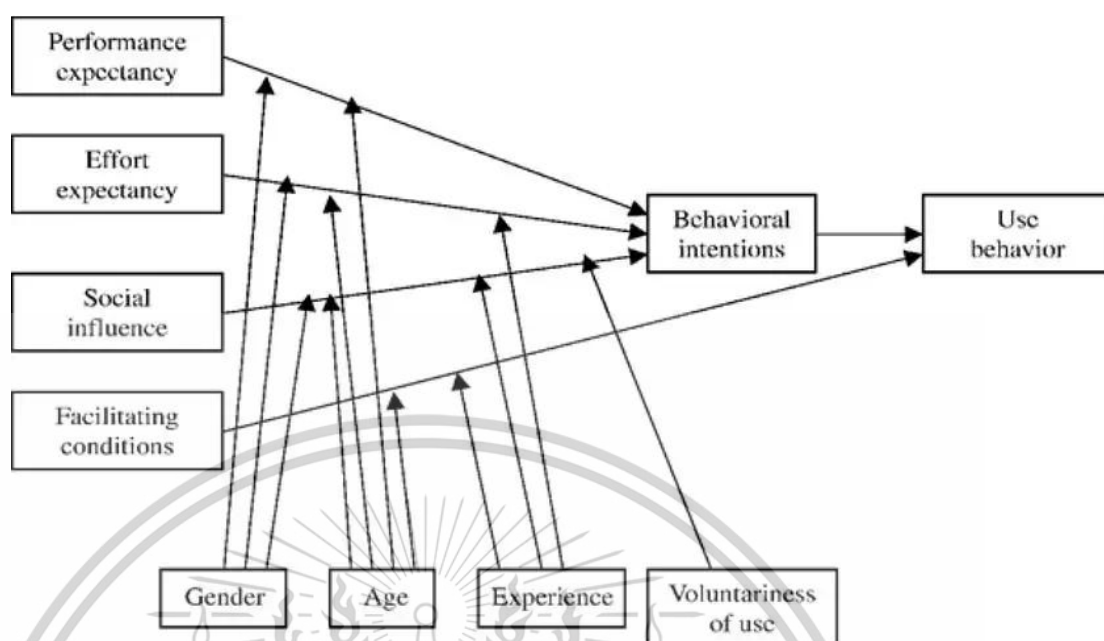


Figure.2.3 Unified Theory of Acceptance and Use of Technology model
Source:Morris,(2003)

2.2.1.5 The Extended Unified Theory of Acceptance and Use of Technology (UTAUT2)

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)(Venkatesh, Morris, Davis& Davis,2003) (see Figure 2.4) represents an extension of the original UTAUT model to consumer contexts. This enhanced framework incorporates three additional core constructs: hedonic motivation, price value, and habit, while omitting the voluntariness modifier from the original model and adjusting other variable relationships.The model's key extensions include:

Hedonic Motivation: The degree of enjoyment or pleasure derived from technology use (Brown & Venkatesh, 2005).

Price Value: The cognitive balance between perceived benefits and monetary costs of technology adoption (Dodds, Monroe, & Grewal, 1991).

Habit: The automaticity of behavior resulting from learned experience(Limayem, Hirt & Cheung, 2007).

This adaptation reflects the distinctive characteristics of consumer technology adoption, where non-utilitarian factors play a significant role in user behavior for commercial use.

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Third, Based on the definitions of price value and habit formation, the digital education platform examined in this study was purchased by schools for rural teachers' use. Since these teachers do not need to consider the platform's price value as a variable, this study excluded price value from analysis. Additionally, if teachers have prior experience using digital education platforms, they are likely to continue using them. Therefore, the study excluded habit formation as a variable, focusing instead on examining the factors influencing willingness to adopt digital education platforms.

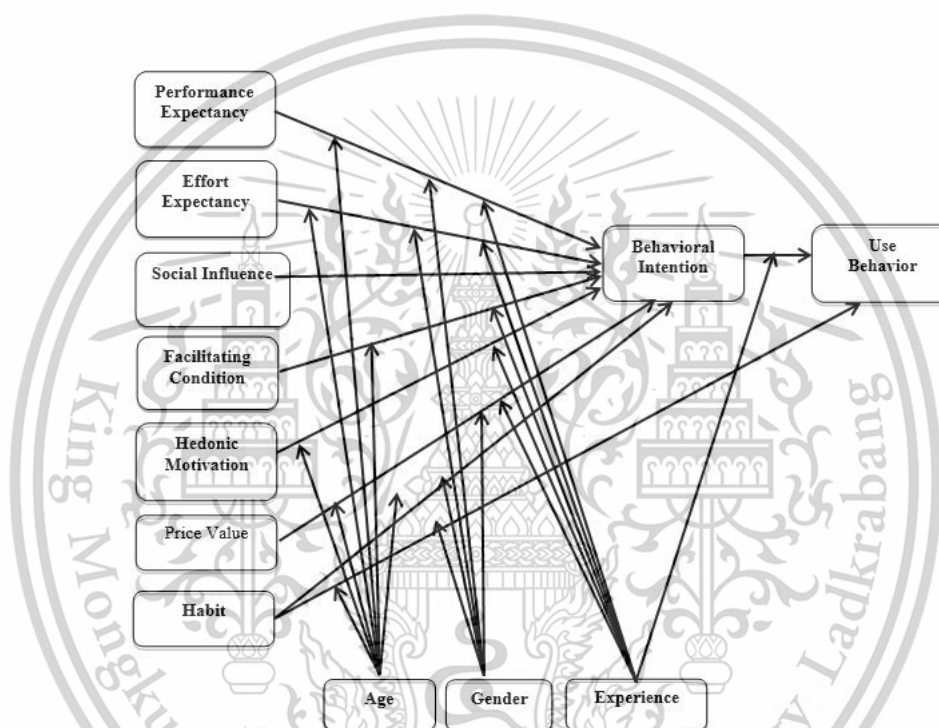


Figure.2.4 The Extended Unified Theory of Acceptance and Use of Technology Model
Source: (Brown & Venkatesh, 2005)

2.2.1.6 Application of UTAUT2 Model

In recent years, more and more research results based on UTATU2 perspective are shown in the following table.

Table.2.4 Application of UTAUT2 Model for last ten year between 2014-2024

Scholar/Research	Country	Industry	Findings
(Xu, 2014)	China	Network Games	Social influence emerges as the most significant predictor of

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Scholar/Research	Country	Industry	Findings
			continued usage intention in social networking games (SNGs), followed sequentially by habit, fantasy, enjoyment, achievement, and price value.
(ArenasGaitán,Peral Peral,&Ramón Jerónimo, 2015)	Spain	Internet Banking	The adoption of internet banking among elderly users is primarily determined by four key factors, ordered by their relative influence: habit, performance expectancy, price value, and effort expectancy.
(Kraljic & Pestek, 2016)	Bosnia	Internet	The analysis revealed that elderly users demonstrate greater sensitivity in mobile internet adoption. Moreover, the findings indicate no statistically significant gender-based moderation effect on the relationship between QT and mobile internet usage.
(Macedo, 2017)	Portugal	Information and communication technology	The findings substantiate that the majority of UTAUT2 constructs demonstrate significant relevance for this demographic cohort, with differential effect pathways: behavioral intention and habit exhibit direct effects, while performance expectancy, effort expectancy, social influence, facilitating conditions, and hedonic motivation operate through indirect mechanisms.
(Alalwan, Dwivedi, Rana & Algharabat , 2018)	United Kingdom	Internet Banking	Path analysis indicates significant positive effects of performance expectancy, effort expectancy, hedonic motivation, and price value on behavioral intention, along with a significant negative effect of perceived risk (all $p < 0.05$).

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Scholar/Research	Country	Industry	Findings
(Li, 2012)	Portugal	Mobile health	Notably, social influence fails to achieve statistical significance in predicting behavioral intention ($p>0.10$). Partial least squares structural equation modeling (PLS-SEM) analysis demonstrates that performance expectancy, hedonic motivation, and habit constitute significant predictors of M-Health adoption.
(Nikolopoulou, Gialamas & Lavidas, 2020)	Greece	Mobile phones	The analysis identified habit as the most influential predictor of students' behavioral intention to utilize mobile devices for academic purposes, followed by performance expectancy and hedonic motivation.
(Van Droogenbroeck & Van Hove, 2021)	Belgium	E-Grocery Shopping	The analysis reveals that four of the five hypothesized context-specific constructs—perceived risk, time pressure, in-store shopping enjoyment, and innovativeness—significantly contribute to explaining consumers' intention to adopt or continue using e-grocery services.
(Korkmaz, Fidanoglu, Ozcelik, & Okumus, 2021)	Turkey	autonomous public transport systems	The analysis confirms that performance expectancy, social influence, habit, and trust and safety exert statistically significant positive effects on behavioral intention toward Advanced Public Transportation Systems (APTS). Moreover, widespread public adoption and acceptance are critical prerequisites for realizing the

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Scholar/Research	Country	Industry	Findings
(Pratama & Renny, 2022)	Indonesia	Mobile banking	full potential of APTS implementations. The results of this study indicate that performance expectancy, effort expectancy, facilitating conditions, habit and trust have a positive effect on behavioral intentions, price values have a negative effect on behavioral intentions and social influences, hedonic motivation, risk and security have no influence on behavioral intentions.
(García-Murillo, Novoa-Hernández & Serrano Rodríguez, 2023)	Ecuadoria	Moodle	The study revealed consistently high acceptance levels of Moodle among Ecuadorian educators, with no significant variation observed across demographic factors including age, gender, ethnic background, or academic discipline.
(Wijaya, Su, Cao, Weinhandl & Houghton, 2024)	China	AI Chatbots	The findings demonstrate that performance expectancy (PE) emerges as the sole significant predictor of behavioral intention (BI) regarding AI chatbot adoption among preservice mathematics teachers, distinguishing this cohort's technology acceptance patterns.

As can be seen from Table 2.4, the research fields of UTAUT2 include Internet Banking, autonomous public transport systems, Mobile phones, etc., but few rural teachers use digital education platforms based on UTAUT2.

2.2.2 Innovative Diffusion Theory (IDT)

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Since the 1960s, how and why individuals adopt innovation has inspired much research. At the same time, there are quite a number of scholars such as Fourt and Woodlock (Fourt & Woodlock, 1960), Mansfield (Mansfield, 1961), Floyd (Floyd, 1962), Rogers (Rogers, 1962), Chow (Chow, 1967) and Bass (Bass, 1969) and others have done a series of pioneering work on the modeling and prediction of innovation diffusion, mainly in the consumer durable goods marketing, communication and other fields put forward the new products, new technology diffusion model (Meade & Islam, 2006). Innovation diffusion theory and its associated models have been extensively applied across diverse domains—including society, economy, agriculture, education, and medicine—to predict the adoption of innovations and new products. As outlined in Table 2.5, the following four theoretical frameworks trace the evolution of innovation diffusion theory, while also examining how innovation characteristics influence adoption decisions within social systems.

Table.2.5 Theory of the Development Process of Innovative Diffusion Theory

Source	Theory	Theoretical Content
(Tarde, 1903)	Tarde's Theory of Imitation	Tarde's (1903) seminal work posits that imitation arises when individuals perceive substantial benefits from adopting novel ideas or products, constituting a fundamental principle of social diffusion.
(Katz, 1973)	Katz's Diffusion Modes Based on Compatibility	Katz (1973) proposed that compatibility should serve as the foundational concept in innovation diffusion research. He defined compatibility as "the degree to which an innovation is perceived as consistent with existing social structures, cultural values, and media environments." When a new technology or idea aligns closely with these contextual factors, it is more likely to achieve rapid, widespread adoption.
(Rogers, 1962)	Rogers's Innovative Diffusion Theory	Rogers (1962) conceptualized diffusion as "the temporal process by which an innovation is communicated through specific channels among members of a social system." He operationalized diffusion efficacy through two key metrics: (1) the innovation's adoption rate within a target population, and (2) the interdependent functioning of four fundamental components: (i) the innovation itself, (ii) communication channels, (iii) the social system, and (iv) time.

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Source	Theory	Theoretical Content
(Bass, 1969)	Bass Model	The Bass model employs differential equations to mathematically represent innovation diffusion processes, particularly for forecasting new product market penetration. This model operates under six key assumptions: (1) constant market potential throughout the diffusion period, (2) independence from competing innovations, (3) static geographical boundaries of the social system, (4) binary adoption states (adopt/non-adopt), (5) unlimited supply capacity, and (6) homogeneity among potential adopters.

2.2.2.1 Tarde's Theory of Imitation

The diffusion of innovations was significantly advanced by Tarde's (1903) (Tarde, 1903) seminal work on imitation theory, which proposed two fundamental mechanisms: the logical law of imitation and non-logical imitation. The logical law posits that adoption occurs through rational cost-benefit analysis, where individuals imitate when perceived benefits outweigh costs. Conversely, non-logical imitation occurs when symbolic benefits (e.g., prestige, social capital) drive adoption regardless of utilitarian value.

Three critical theoretical propositions emerge:

Rational Imitation: Adoption follows utility maximization principles (Tarde, 1903).

Symbolic Imitation: Status-seeking behaviors explain adoption without functional benefits.

Bounded Rationality: External constraints (family influence, economic capacity, access barriers) mediate the intention-behavior gap.

2.2.2.2 Katz's Diffusion Modes Based on Compatibility

Katz (1973) established compatibility as a foundational construct in innovation diffusion research, defining it as "the perceived congruence between an innovation's attributes and the adopters' socio technical environment." (Katz, 1973). His theoretical model posits that when an innovation demonstrates high compatibility with individuals' social structures, cultural norms, and media ecosystems, it achieves accelerated diffusion velocity. This framework highlights two critical mechanisms: (1) compatibility's catalytic effect on adoption rates, and (2) the moderating role of sociocultural systems in diffusion pathways.

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2.2.2.3 Rogers's Innovative Diffusion Theory

Rogers (1962) conceptualizes innovation as an idea, practice, or object adopted by individuals or other units of adoption (Rogers, 1962). This definition encompasses both abstract concepts and tangible technological advancements. Rogers' theory of innovation diffusion comprises several key components: the innovation-decision process, individual innovativeness, perceived attributes of innovation, and the rate of adoption (Zhang, 2009).

The innovation-decision process consists of five sequential stages: knowledge, persuasion, decision, implementation, and confirmation (Lin, 2003). During the knowledge stage, individuals seek to understand the nature, mechanisms, and rationale behind an innovation, with mass media serving as an effective channel for disseminating such information. In the persuasion and decision stages, individuals increasingly seek evaluative information regarding the advantages and disadvantages of the innovation, often relying on interpersonal networks for such assessments. Subjective evaluations from others may significantly influence an individual's innovation-adoption decision, which can result in either acceptance or rejection. The implementation stage involves the practical application of the innovation, while the confirmation stage entails an individual's assessment of the outcomes derived from its use.

Rogers posits that the adoption rate of an innovation is contingent upon its perceived characteristics. Empirical studies indicate that relative advantage, compatibility, complexity, trialability, and observability constitute the most critical attributes influencing adoption. Innovations perceived as offering greater relative advantages over alternatives, aligning with societal values and individual needs, demonstrating high compatibility with prior experiences, being easily testable, and yielding observable results tend to be adopted more rapidly.

Rogers defines diffusion as "the process by which an innovation spreads through a specific social system over time" and proposes that diffusion effectiveness should be measured by consumer adoption rates, along with four essential elements: innovation, communication channels, social systems, and time (Rogers, 2002). His theoretical framework emphasizes that:

Innovation attributes and user perceptions determine adoption speed, with key cognitive attributes including relative advantage, compatibility, complexity, trialability, and

observability.

Communication channels play a pivotal role in shaping individual attitudes. Rogers distinguishes between mass media and interpersonal communication, highlighting that the degree of heterogeneity among adopters significantly impacts the diffusion process.

Social system structure influences diffusion through factors such as institutional norms, the role of opinion leaders and change agents, types of innovation decisions, and innovation outcomes.

Numerous scholars have applied Rogers' theory in empirical research. For instance, he examined factors affecting the diffusion of government microblogs (Chen, 2021); They investigated domestic consumers' adoption of VR technology (Liu, 2021); They analyzed the global urban network's adoption of blockchain technology (Zhang, 2022); They explored the diffusion of artificial intelligence technology (Wang, Chen, Liu, Peng, Long & Shi, 2023); and he studied the dissemination patterns of the Beidou satellite navigation system (Gao, 2021).

2.2.2.4 Bass Model

The Bass model employs a differential equation framework to characterize the innovation diffusion process, making it particularly applicable for forecasting market adoption patterns of novel products (Bass, 1969). This theoretical construct operates under several fundamental assumptions: (1) market potential remains constant throughout the diffusion period; (2) the diffusion process occurs independently of other innovations; (3) geographical boundaries of the social system remain static during diffusion; (4) the population exists in binary states of either adoption or non-adoption; (5) supply constraints are nonexistent; and (6) adopters constitute a homogeneous group without differentiation.

While the Bass model and its subsequent theoretical extensions have been widely utilized as analytical tools for predicting demand patterns of innovative products and technologies, certain limitations merit consideration. The model demonstrates theoretical robustness primarily when applied to established products with measurable market histories. For newly introduced products, predictive accuracy may be compromised due to consumers' unfamiliarity with product performance and quality characteristics. This knowledge gap creates challenges for enterprises attempting to reliably estimate the model's innovation and imitation coefficients during early market phases.

Addressing these limitations, Xie (2020) proposed an enhanced theoretical framework that extends the Bass model by incorporating competitive dynamics and negative word-of-mouth effects through a multi-state innovation diffusion approach. This advancement provides a more nuanced understanding of market adoption processes under realistic conditions of competition and consumer feedback mechanisms.

2.2.2.5 Application of Innovative Diffusion Theory

Several recent studies have applied innovation diffusion theory (IDT) and technology acceptance models to examine technology adoption across various domains:

(Li, Yang, Zhang, Tian, Guo & Yu, 2024) employed IDT and the Technology Acceptance Model (TAM) to analyze the adoption of Chat GPT among 677 university students through a structured questionnaire survey, providing empirical insights into user acceptance of AI-based conversational tools.

(Bokolo, 2023) developed a conceptual framework based on Diffusion of Innovation (DOI) theory to assess the determinants influencing individual adoption of e-Mobility-sharing services, proposing strategies to enhance their market penetration.

(Pinho, Franco & Mendes, 2021) conducted a quantitative study involving 631 Portuguese university students to examine Moodle LMS adoption, utilizing structural equation modeling to demonstrate that system attributes—derived from IDT and personal innovativeness in IT—positively impact its usage in academic settings.

(Al-Rahmi, Yahaya, Alamri, Alyoussef, Al-Rahmi, & Kamin, 2021) integrated TAM with IDT to explore factors shaping students' behavioral intentions toward MOOCs, proposing an extended acceptance model to better predict e-learning platform adoption.

These studies collectively highlight the applicability of diffusion and acceptance theories in understanding technology adoption across diverse contexts.

2.2.3 The Trust Theory (TTT)

The conceptual foundations of trust theory were first established by German sociologist Georg Simmel in his seminal works *The Philosophy of Money* (Simmel, 2002) and *Sociology* (Simmel, 2002). Since its inception, trust—as both a psychological state and a personality trait—has garnered significant scholarly attention across multiple disciplines,

including psychology, sociology, economics, and management. Although a universally accepted definition remains elusive, a prevailing consensus in trust research is that "trust serves as a fundamental prerequisite for social functioning and the occurrence of interactive behaviors."

With the transition from traditional to modern society, British sociologist Anthony Giddens critically synthesized existing social theories to construct a comprehensive trust framework from a multidisciplinary perspective. Giddens (2000) posited that trust originates from the human need for "ontological security" and suggested that active trust would increasingly supplant passive trust in modern societies. His theoretical contributions have become foundational to contemporary Western trust research, particularly in sociological studies.

Disciplinary Variations in Trust Research

Trust theory exhibits distinct emphases across different academic fields:

Psychological Perspective

As the earliest discipline to examine trust, psychology primarily focuses on interpersonal trust, emphasizing assessments of dependability and faith (Sorrentino, 1995). Psychological studies define trust as an individual's confidence that another party will act in their best interests, demonstrating reliability and availability in future interactions.

Sociological Perspective

Sociology attributes a social dimension to trust, framing it as a relational construct shaped by environmental, economic, and political contexts (Barber, 1983). Trust is regarded as a social mechanism that fosters cohesion and sustains societal structures, reinforcing the interdependence between individuals and institutions.

Economic Perspective

Grounded in the rational choice paradigm, economics conceptualizes trust as a calculated decision based on risk-benefit analysis (Lewicki & Bunker, 1996). Arrow (1974) further characterizes trust as an implicit contract that facilitates economic transactions by reducing uncertainty and transaction costs.

Management Perspective

In management studies, trust is viewed as a governance mechanism that regulates

organizational and interpersonal dependencies (Kasper-Fuehrer & Ashkanasy, 2001). The degree of trust is influenced by the alignment of individual and organizational interests, affecting collaborative behaviors and decision-making processes.

To systematically analyze these perspectives, this study selects four representative trust theories and models, as summarized in the following table.

(Note: The table referenced in the original text would be included here, outlining key models and their applications.)

This multidisciplinary examination underscores the evolving nature of trust theory and its critical role in explaining social, economic, and organizational phenomena.

Table.2.6 Four Representative Trust Theories

Source	Theory	Theoretical Content
(Mayer, Davis & Schoorman, 1995)	Mayer's Theory of Organizational Trust	<p>In a seminal contribution to trust research, Mayer, Davis & Schoorman (1995) synthesized prior theoretical and empirical work on trust antecedents, mechanisms, and consequences to develop an integrative trust model. This framework systematically incorporates both the characteristics of trustors (trusting parties) and trustees (trusted parties), while accounting for the inherent risks in trust relationships. The model identifies three critical attributes of trustees that significantly influence trust formation:</p> <p>Ability - Refers to the trustee's possession of requisite competencies, technical skills, and knowledge to fulfill the trustor's needs and expectations.</p> <p>Benevolence - Denotes the trustee's demonstrated willingness to prioritize the trustor's interests above self-interest, thereby avoiding opportunistic behaviors that might harm the trustor.</p> <p>Integrity - Concerns the trustee's adherence to ethical principles and commitment to providing accurate, transparent information to the trustor.</p> <p>These trustee characteristics function as key determinants in the trust-building process, while the model also incorporates important moderating variables such as the trustor's propensity to trust and the perceived risk associated with the trusting behavior. The theoretical framework has become foundational in organizational</p>

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Source	Theory	Theoretical Content
		behavior research, providing a robust basis for examining trust dynamics across various interpersonal and institutional contexts.
(McKnight, Cummings & Chervany, 1998)	Mcknight's Initial Trust Theory	<p>Building upon the theoretical foundations of Disposition to Trust and institutional-based trust, McKnight and colleagues (1998) developed the Model of Initial Trust Formation to elucidate the phenomenon of elevated trust levels in nascent relationships. This conceptual framework specifically examines the latent cognitive mechanisms underlying high initial trust between previously unacquainted parties.</p> <p>The model diverges from conventional trust theories by focusing exclusively on the pre-interaction phase, thereby excluding post-contact behavioral verification processes (e.g., observed trustee reliability). Instead, it incorporates two primary antecedent categories:</p> <p>Dispositional Factors - Reflecting the trustor's inherent propensity to trust, shaped by personality traits and socialization experiences.</p> <p>Institutional Mechanisms - Pertaining to contextual safeguards such as structural assurances and situational normality that facilitate trust without prior interaction history.</p> <p>Through this theoretical lens, the authors identify cognitive processes—including categorization processes and illusory correlation—that contribute to rapid trust formation in initial encounters. The model's distinctive contribution lies in its ability to explain trust emergence in the absence of interpersonal experience, making it particularly relevant to e-commerce, virtual teams, and other low-familiarity interaction contexts.</p>
(Gefen, 2000)	Gefen's Online shopping consumption trust Theory	<p>(Gefen, 2000) conducted pioneering research in e-commerce trust by developing an online shopping consumption model through an empirical study of Amazon.com. This foundational work systematically examined the relationship between consumer familiarity and trust formation in digital product inquiries, establishing key parameters for understanding web-based commercial interactions.</p> <p>Building upon this research, (Gefen, Karahanna & Straub, 2003) subsequently advanced the theoretical framework by integrating established trust theory with</p>

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Source	Theory	Theoretical Content
		<p>the Technology Acceptance Model (TAM). This synthesis resulted in the Trust & TAM model, a conceptual innovation specifically designed to analyze online shopping behavior in e-commerce environments. The model's distinctive contribution lies in its dual focus on:</p> <p>Technological acceptance factors (perceived usefulness and ease of use)</p> <p>Interpersonal trust mechanisms (credibility and benevolence)</p> <p>This theoretical integration addressed a critical gap in e-commerce research by simultaneously considering both technological adoption barriers and psychosocial trust barriers. The Trust & TAM model has since become a seminal framework in digital consumer behavior studies, particularly for its ability to explain variance in online purchase intentions beyond what traditional TAM could account for alone.</p>
(Teo, Srivastava & Jiang, 2008)	Teo's E-government website trust model	<p>Building upon DeLone and McLean's (1992, 2003) information systems success model, Teo and colleagues (2008) developed a comprehensive theoretical framework to examine trust formation in e-government contexts. The proposed model conceptualizes citizen trust in government websites as comprising two fundamental dimensions: (1) Trust in Government - reflecting confidence in the public institution's integrity and benevolence. (2) Trust in Technology - pertaining to beliefs about the website's technical reliability and security. The model posits that these trust dimensions significantly influence users' perceptions of three critical quality metrics: (1) Information Quality (accuracy, relevance, and timeliness of content). (2) System Quality (functionality, usability, and performance). (3) Service Quality (responsiveness and support).</p> <p>These quality perceptions subsequently affect two key outcome variables: (1) User Satisfaction (immediate affective evaluation). (2) Intention to Continue Using (behavioral loyalty). This theoretical advancement made significant contributions to digital governance research by:</p> <p>Integrating institutional trust with technology acceptance constructs.</p> <p>Establishing measurable pathways between trust</p>

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Source	Theory	Theoretical Content
		antecedents and system success metrics. Providing a validated framework for assessing e-government adoption barriers.

2.2.3.1 Mayer's Theory of Organizational Trust

According to the theory, the trust tendency of the trust subject has a regulatory effect on the path between the characteristics of the trusted party and the trust (Trust), and has a direct impact on the trust. Trust leads to a certain risk (Risk Taking in Relationship) in this interactive relationship, and the path relationship between trust and risk bearing is regulated by the risk perceived by the trust subject (Perceived Risk). The outcome of risk taking (Outcomes) in turn has a callback impact on the three dimensional characteristics of the trusted party. It reviewed the above theoretical model in 2007 and clarified and expanded the topics of analytical hierarchy, time, control system, mutual specificity and measurement (Schoorman, Mayer & Davis, 2007).

The integrative trust model proposes that trust formation operates through a complex, recursive mechanism with several key theoretical propositions:

Moderating Effects of Trust Propensity

The trustor's dispositional tendency to trust serves dual functions:

- a) Moderates the relationship between trustee characteristics (ability, benevolence, integrity) and trust formation
- b) Directly influences the baseline level of trust

Trust-Risk Behavioral Pathway

Established trust enables risk-taking behaviors (Risk Taking in Relationship)

This relationship is contingent upon the trustor's subjective risk assessment (Perceived Risk)

Feedback Mechanism

The consequences of risk-taking (Outcomes) create a feedback loop that subsequently modifies perceptions of the trustee's characteristics (Schoorman, Mayer & Davis, 2007). It conducted a comprehensive theoretical refinement of the original model, incorporating

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several critical advancements:

Clarification of analytical levels (individual vs organizational)

Temporal dimensions of trust evolution

Role of control systems in trust calibration

Dyadic specificity in trust relationships

Methodological improvements in construct measurement

This enhanced framework provides a more nuanced understanding of trust dynamics by:

(1) Accounting for contextual and temporal factors

(2) Specifying boundary conditions for trust effects

(3) Establishing clearer operational definitions

(4) Incorporating reciprocal causal pathways

2.2.3.2 Mcknight's Initial Trust Theory

The trust construct comprises two fundamental components: Trusting Beliefs (cognitive evaluations of trustee attributes) and Trusting Intention (behavioral willingness to depend on others). Trust formation emerges from the interplay of three key antecedents:

(1) Trust Propensity

Trusting Stance: An individual's general disposition to rely on others

Faith in Humanity: The belief that others are inherently trustworthy

(2) Institution-Based Trust

Structural Assurance Beliefs: Confidence in protective mechanisms (contracts, regulations)

Situational Normality Beliefs: Perceptions of environmental stability and predictability

(3) Cognitive Processes

Categorization Processes: Mental classification of trustworthiness indicators

Illusion of Control: Overestimation of personal influence in uncertain situations

Pathway Relationships: (1) Direct effects: Trusting intention is immediately shaped by trusting stance, structural assurances, situational normality, and trusting beliefs. (2) Indirect effects: Faith in humanity, structural assurances, and categorization processes indirectly influence trusting intention through trusting beliefs. (3) Moderating effects: Illusion of control moderates relationships between categorization processes and trusting beliefs, as well as

between faith in humanity/structural assurances and trusting beliefs.

Model Extension (McKnight & Chervany, 2001):

The Trust Building Model (TBM) adapted this framework for e-commerce contexts, establishing that:

Trust beliefs and intention directly affect three key consumer behaviors: Compliance with vendor recommendations; Willingness to share personal information

Purchase intention

Perceived network risk serves as a critical moderator of these relationships

This theoretical evolution significantly advanced trust research by: (1) Systematizing micro-level trust formation mechanisms. (2) Operationalizing institutional trust components. (3) Establishing measurable behavioral outcomes. (4) Providing empirical validation in digital environments.

2.2.3.3 Gefen's Online shopping consumption trust Theory

According to the model, Calculative-based Trust, Institution-based Structural Assurances, Institution-based Situational Normality, Knowledge-based Familiarity, and Perceived Ease of User can directly affect the individual consumption trust, Where institution-based contextual norms and knowledge-based familiarity act together on perceived ease of use, Presa positive correlation. Perceived ease of use and trust have a positive impact on Perceived Usefulness, and perceived ease of use, perceived usefulness and trust can also positively affect individual purchase intention.

2.2.3.4 Teo's E-government website trust model

Trust in e-government websites not only indirectly affects user satisfaction and continuous usage intention through website quality perception but also exerts a direct impact on them. Empirical findings reveal that trust in the government significantly and positively influences trust in e-government websites, while the latter, in turn, has a significant positive effect on the dimensions of website quality perception. Specifically, information quality significantly and positively affects continuous usage intention; system quality and service quality, on the other hand, significantly and positively impact user satisfaction, which further exerts a positive influence on usage intention. Overall, trust in e-government websites can directly exert a positive effect on users' satisfaction and their willingness to continue using

such platforms.

2.2.3.5 Application of The Trust Theory

(Shahzad, Xu, & Javed, 2024) This research examines the awareness, acceptance, and adoption of ChatGPT—a cutting-edge language model developed by OpenAI—within higher education institutions in China. Employing the partial least squares structural equation modeling (PLS-SEM) approach, the study analyzes data gathered from 320 university students in China. The findings indicate that perceived trust plays a significant moderating role in the relationships between ChatGPT awareness and three key perceptual variables: perceived ease of use, perceived usefulness, and perceived intelligence.

(Ayanwale, Adelana & Odufuwa, 2024) This study fills a notable research gap by exploring the trust dynamics among 677 in-service Science, Technology, Engineering, Arts, and Mathematics (STEAM) teachers in Nigeria regarding AI-driven educational technologies. Utilizing structural equation modelling for data analysis, the results indicate that three key factors— anxiety, preferred trust-building approaches, and perceived advantages— exert a significant influence on teachers' trust in AI-based educational technologies.

(Wang, Chen, Liu, Peng, Long & Shi, 2023) In light of the evaluative attributes and intelligent characteristics inherent in such systems, this study proposes an integrated theoretical framework by extending the Technology Acceptance Model (TAM) with the Fear of Evaluation Theory and the construct of trust in artificial intelligence (AI). The empirical results demonstrate that teachers' trust in AI-driven teaching analysis systems positively predicts both their perceived usefulness of the system and their willingness to adopt it in practice.

(Hosen, Ogbeibu, Lim, Ferraris, Munim & Chong, 2022) This study endeavors to investigate knowledge sharing behavior (KSB) among academic professionals from a behavioral perspective, drawing upon the Theory of Planned Behavior (TPB), alongside the constructs of perceived trust and organizational climate as analytical lenses. The findings reveal that five core factors— attitude, subjective norms, perceived behavioral control (PBC), perceived trust, and organizational climate— exert a direct and significant influence on academics' knowledge sharing intention (KSI).

This manuscript is based on Trust Theory and Expectation Confirmation Theory, this study

proposes an integrated theoretical framework that positions user satisfaction as a mediating variable. The analysis reveals that digital trust is subject to direct and indirect influences from two key antecedents: user perceptions and user expectations.

2.2.4 The Theory of Technological Pedagogical and Content Knowledge(TPACK)

2.2.4.1 The Theory of TPACK

TPACK full name is Technological Pedagogical and Content Knowledge. The knowledge framework of TPACK was formally proposed by Mishra and Koehler in 2006, and has since evolved into an essential competency for educators in the information era. Within this framework, teachers serve as the pivotal factor in determining the quality of technology-education integration. TPACK emphasizes the interactive relationships among three core knowledge domains: Content Knowledge (CK), Pedagogical Knowledge (PK), and Technological Knowledge (TK). As noted by (Mishra & Koehler, 2006), TPACK is widely recognized as one of the most influential models for delineating teachers' competencies required to effectively integrate technology into instructional practices.

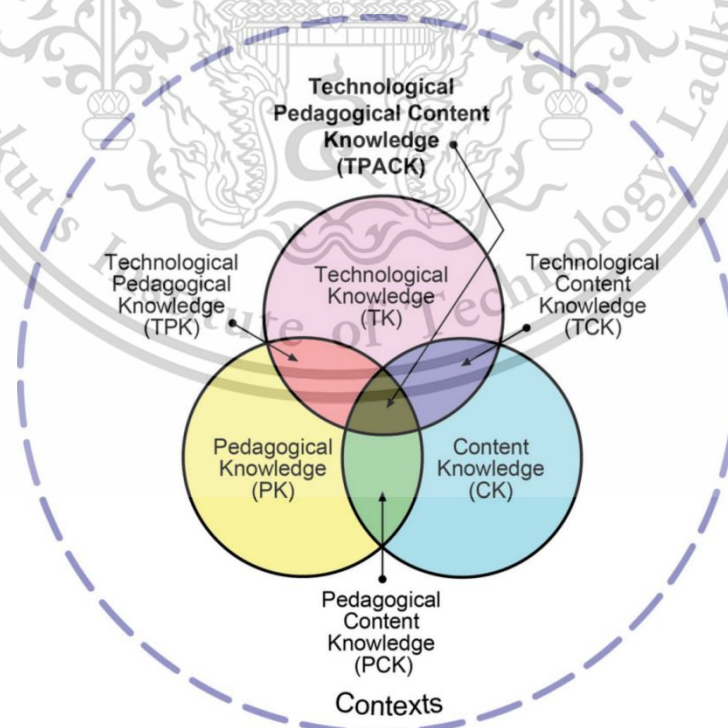


Figure.2.5 The framework of TPACK

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Research on Influencing Factors of Pre-Service Mathematics Teachers' Acceptance of Micro-Lecture Based on UTAUT2 Model(Li, 2023).The TPACK framework highlights the role of technology in teacher education and teacher professional development(Chai, Koh & Tsai, 2013), so TPACK capacity development is mainly achieved through the effective use of technology in teaching practice. However, so far, there is a controversial question in the theoretical community, that is, which technology is included in the technical knowledge in TPACK? Although it is difficult to distinguish TPACK components, the only factor that can be distinguish is technology(Yu, 2014). Koehler and Mishra consider that technology refers to all technologies(Koehler & Mishra, 2016;Graham, Burgoyne,Cantrell, Smith, Clair & Harris, 2009).While Cox and Graham believe that it refers to the new technology relative to the traditional technology, and some scholars believe that the technical knowledge refers to the digital technology knowledge.(Lim, Ang& Koh, 2016) Some people believe that when teachers help students develop social, cognitive, metacognitive and productive capacity, teachers should not only use information and communication technology (ICT) to transmit information, but go beyond this technology(Koh, Chai,& Lim, 2017).

The TPACK level of teachers will not only directly affect the effect of digital teaching, but also lead to teachers' choice of digital teaching methods, for the following reasons:

First of all, many new teachers of digital teaching find that digital teaching increases the time, investment and cost of their teaching preparation. Due to the introduction of digital teaching, it not only increases the frequency and frequency of teaching evaluation, but also requires additional time and technical support for teachers to make or choose teaching videos, build online courses, upload learning resources, design learning activities in the classroom, and reflect on teaching. In addition, in terms of cost, the implementation of digital classroom teaching requires investment to pay for certain pre-class resources, such as payment to digital education platforms to obtain certain course resources for digital classroom teaching, and the purchase of royalties for online platforms.

Secondly,teachers' Technological Pedagogical and Content Knowledge (TPACK) level exerts not only a direct impact on the effectiveness of digital teaching but also influences their selection of digital teaching methods, for the following reasons:

First, many novice teachers engaging in digital teaching perceive that such practices

elevate the time, effort, and costs associated with instructional preparation. The integration of digital teaching not only increases the frequency and intensity of teaching evaluations but also imposes additional demands on teachers, who must allocate extra time and secure technical support to create or select instructional videos, develop online courses, upload learning resources, design in-class learning activities, and conduct teaching reflections. In terms of costs, the implementation of digital classroom teaching requires investments in pre-class resources, such as fees paid to digital education platforms for accessing course materials, and expenditures on royalties for online platforms.

Second, teachers' own competencies in conducting digital teaching are insufficient. A key obstacle for teachers in digital teaching lies in their ability to design, implement, and evaluate the effectiveness of digital instruction (O'Flaherty & Phillips, 2015). Digital teaching represents a distinct instructional mode, regarded as a strategy to genuinely enhance students' learning experiences by boosting interactivity. It differs from traditional teaching not only in design processes but also in underlying concepts, placing additional pressure on educators to update their curricula using methods they may not have fully grasped previously.

Furthermore, the in-class component of digital teaching requires teachers to adeptly address students' on-site questions, which poses significant challenges to the depth and breadth of their knowledge mastery as well as their ability to connect knowledge across domains. For teachers lacking teaching support, reviewing questions submitted by students before class can also be highly labor-intensive (Berrett, 2012). Effective digital instructors function similarly to skilled coaches: "knowing what makes a great athlete and what training helps achieve that, motivating learners to exert great effort, and providing timely expert feedback."

Thus, teachers' TPACK competencies constitute a key personal determinant of their use of digital teaching. Similarly, the implementation of digital teaching necessitates the utilization of digital education platform resources; consequently, teachers' TPACK competencies are among the critical factors influencing their willingness to use digital education platforms.

2.2.4.2 Application of TPACK

(García de Blanes Sebastián, Azuara Grande & Sarmiento Guede, 2023) By integrating

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constructs from established technology adoption frameworks — including the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT) — and incorporating the Technological Pedagogical and Content Knowledge (TPACK) theory, this study develops and empirically validates a novel research model. Additionally, the findings underscore that facilitating conditions and management support exert a positive influence on TPACK, which in turn contributes favorably to self-efficacy, perceived usefulness, and perceived ease of use.

(Mohebi, 2021) This study conducts a systematic review and analysis of theoretical frameworks and models employed in research on technology integration in classroom settings. The reviewed models include: the Teacher Thoughts and Action Process (TTAP), the Theory of Planned Behavior (TPB), the Expectancy-Value Theory of Achievement Motivation (EVAM), the Substitution Augmentation Modification Redefinition (SAMR) model, the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Technological Pedagogical and Content Knowledge (TPACK) framework.

(Apandi & Raman, 2020) This study examines the determinants influencing the adoption of blended learning by synthesizing the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and the Technological Pedagogical Content Knowledge (TPACK) framework. A systematic analysis of this integrated model will enable policymakers and educational stakeholders to identify key facilitators and barriers affecting teachers' acceptance of blended learning. The findings will provide evidence-based strategies to enhance adoption rates and optimize implementation in educational settings.

2.3 Applied Research on Related Theories of The Study

2.3.1 Overview of the Development of Digital Education in China

Digital education, also referred to as online education (e-learning), encompasses web-based learning activities, including network courses, distance education, and virtual instruction. This mode of education relies on digital media, such as internet-connected devices (e.g., smartphones, tablets, computers) and network infrastructure (wired or wireless). Key

participants include learners and educators, along with content providers, platform administrators, and teaching assistants in some cases.

Historical Evolution of Online Education in China,online education in China emerged in the 1990s and has evolved through four distinct phases (see Table 2.7):

(1)Embryonic Stage (1990–2005)

Early adopters included 101 Online School, Huanggang Middle School, and Beijing No. 4 Middle School.Limited internet penetration and low smart device adoption restricted participation, resulting in slow growth.

(2)Survival and Exploration Stage (2006–2012)

Traditional institutions (e.g., New Oriental Online, Huijiang English) transitioned to digital platforms.Video-based courseware emerged as a dominant instructional format.

(3)Rapid Growth Stage (2013–2017)

Expansion of mobile internet and increased investment in online education.Proliferation of e-learning platforms (e.g., Homework Help, Fluent English Speaking, NetEase Open Course).

(4)Initial Maturity Stage (2018–Present)

Integration of AI, big data, and VR technologies enhanced learning experiences.Market expansion into diverse sectors, including K12 education, vocational training, and lifelong learning.

Market Growth and Current Trends

The online education market in China surpassed ¥100 billion in 2017, growing at ~30% annually, and exceeded ¥540 billion by 2022 (see Figure 2.5).

Coverage now spans early childhood education, K12, interest-based courses, and professional development (see Table 2.7), reflecting a highly diversified landscape (iResearch Consulting, 2021).

Government Initiatives and Future Directions

The 2022 World MOOCs and Online Education Conference, themed "Digital Education Leads the Future", highlighted China's advancements:

61,900 MOOCs with 370 million registered users (Ministry of Education, 2022).

Launch of the National Smart Education Platform, facilitating 29.2 billion course

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accesses and 500 million enrollments.

The "MOOCs Westward" initiative promotes equitable access to high-quality resources, supporting educational reform, teaching innovation, and cross-institutional collaboration.

These developments underscore online education's role in enhancing accessibility, pedagogical quality, and digital equity in China's higher education system (Ministry of Education of the People's Republic of China, 2023).

Table.2.7 The development process of online education in China

beginning stage	Survival stage	growth stage	maturity stage
(Late 90s-2005)	(2006-2012)	(2013-2017)	(2018--)
1.The Internet has just entered China 2.Low network operation,poor product experience 3.Sign event: The state approved 68 colleges and universities as the national modern distance education pilot colleges and universities;	1.Network broadband gradually improve, video courseware has become the mainstream 2.Enterprise business model is going out of the process of exploration 3.New Oriental online, Hujiang and other online schools are online operation	1.The development of the Internet and mobile Internet, and the expansion of broadband, drive technological upgrading 2.The number of start-ups and the amount of inflows soared 3.Products and models are constantly changing, and business models continue to explore 4.Live-streaming classes appear to get through to the business model	1.Resource integration, technological progress and service upgrading drive the continuous innovation of service mode 2.The market pattern has taken initial shape 3.Listed mergers and acquisitions began to appear policy supervision began to tighten

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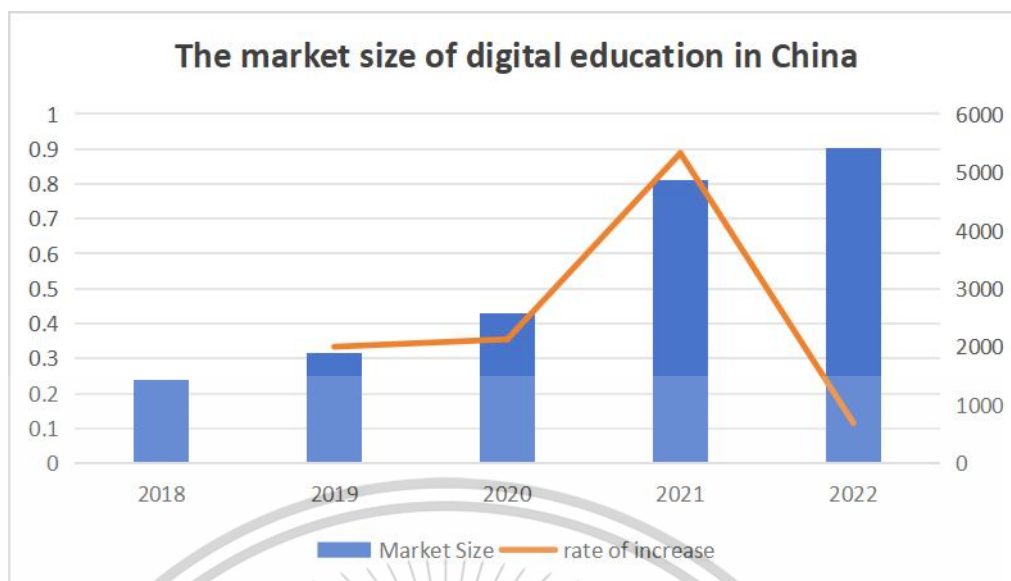


Figure.2.6 The market size of digital education in China

Table.2.8 The classification of online education platforms

Classification	Representative Platform
Early childhood education	BaoBao bashi, NianGao Mama, Duoduo early education, MaiTian literacy
Comprehensive network school	Xueersi online school, Huijiang online school, New Oriental online
Online question bank	Ape question bank, quasi-question bank, in the public question bank
K12 education	GenShui xue, Yuan Fudao, Zhangmen Yi Dui yi, ZuoYeBang
Higher education	Wangyi Open course, MOOCs, Global IELTS
vocational education	Zhongzhong Education, netease Cloud Classroom, Tencent Classroom, Huatu Education, Global Online School

2.3.2 Research on The Status of Digital Education Resources

The effective utilization of digital education resources serves as a critical foundation for enhancing instructional quality and optimizing the pedagogical impact of digital tools (Cai & Chen, 2019). In the domestic context, scholars have primarily examined the application of these resources through three key perspectives: teacher adoption, institutional implementation, and urban-rural disparities. These studies have contributed to a preliminary yet substantive

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understanding of the current state of digital resource integration in educational settings.

Table.2.9 Research on the status of domestic digital education resources

Sources	Research contents
(Cai & Chen, 2019)	<p>Lu Yi conducted a study involving 126 exemplary middle and high school life science teachers in Shanghai to examine the utilization status and challenges associated with digital education resources. The findings revealed that while schools' hardware infrastructure was well-established, the development of software resources remained relatively underdeveloped. Teachers demonstrated proficiency in operating hardware devices but exhibited limited competence in software utilization and digital content creation. Commonly used resources included multimedia courseware, instructional materials, and electronic lesson plans, which were frequently integrated into teaching practices.</p> <p>Overall, the study indicated that Shanghai's outstanding life science teachers exhibited a positive attitude toward adopting digital education resources, recognizing their potential to enhance professional development, improve instructional quality, and facilitate student-centered learning approaches. However, a subset of teachers primarily engaged with these resources for the purpose of meeting teaching evaluation requirements, rather than fully leveraging their pedagogical benefits.</p>
(Chen & Weng, 2014)	<p>A large-scale study was conducted involving over 10,000 primary and secondary school teachers to examine multiple dimensions of digital resource utilization, including hardware infrastructure, teacher competencies, motivational factors, current challenges, and resource needs. The findings indicate that digital education resources have become deeply embedded in contemporary teaching practices, with the majority of educators demonstrating established habits of technology integration. Analysis of resource utilization patterns reveals that electronic lesson plans, digital courseware, and multimedia instructional materials constitute the most frequently employed tools. However, the study identified several limitations in current implementation practices. Most notably, digital resources are predominantly utilized as presentation tools, reflecting a relatively narrow range of pedagogical applications. This pattern suggests that while technological adoption has become widespread, the depth and variety of</p>

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Sources	Research contents
	implementation remain areas requiring further development. The research highlights a significant gap between basic technology adoption and more sophisticated, pedagogically transformative uses of digital resources in classroom settings. These findings have important implications for teacher professional development programs and resource design initiatives aimed at promoting more diverse and effective technology integration strategies.
(Li, 2012)	A comparative study examining information and communication technology (ICT) competencies was conducted with 183 primary and secondary school teachers from both urban and rural areas. The findings reveal significant disparities in digital literacy between these two groups. Specifically, rural teachers demonstrated markedly lower proficiency than their urban counterparts in utilizing common productivity tools such as Microsoft Word and PowerPoint for instructional purposes.
(Zhang Yi, Liu Xiaoli, Fan Fulan & Zhou Ping Yinghong, 2015)	A study examining ICT integration in education was conducted with a sample of 795 teachers, revealing significant disparities in technology adoption between urban and rural educators. The research findings demonstrate a pronounced urban-rural digital divide in pedagogical technology utilization, with rural teachers exhibiting substantially lower levels of ICT implementation in classroom settings.
(Zhang , Fan & Bai, 2014)	Empirical evidence reveals significant disparities in digital resource acquisition and utilization capabilities between educators in under-resourced rural schools and their urban counterparts. Current technological infrastructure in remote rural educational institutions remains predominantly reliant on outdated television/DVD systems, reflecting a pronounced technological gap that fails to meet the demands of contemporary digital education.
(Yang, 2017)	A comprehensive survey of 11,190 full-time teachers revealed suboptimal levels of information technology integration in primary and secondary education. The findings indicate that educators predominantly utilize basic digital tools, including internet searches, text editing, and data processing functions, while demonstrating limited adoption of more sophisticated educational technologies for student interaction and pedagogical innovation.

Sources	Research contents
(Li & Liu, 2017)	In Linxia guanghe county, Gansu province poor rural areas of two village small point as the research object, the study shows that the digital education resources in poor rural areas have not been effective application, teachers application of the main teaching resources for textbooks, the digital education resources in a state of extreme not understanding, to the construction of national quality education resources network also do not understand the application, in addition, there is insufficient information teaching equipment, unable to guarantee the normal operation of information teaching equipment.
(Peng, 2018)	This study examines 590 primary and secondary schools in Guangdong Province, revealing notable regional disparities in the perception and utilization of digital educational resources. Schools in both less developed and developed regions demonstrate a high level of recognition regarding digital resources. However, institutions in less developed areas exhibit greater enthusiasm in applying these resources compared to their counterparts in developed regions. Meanwhile, the demand for digital educational resources shows no significant variation across different regions.
(Liu Yang,2020)	The survey results from the Full Coverage of Digital Education Resources in Teaching Points project in Shandong Province indicate significant improvements in information technology equipment and teachers' digital teaching competencies. However, challenges persist regarding the quality and diversity of both instructional resources and educator expertise.

Foreign scholars have also explored the utilization of digital education resources, with primary research foci encompassing the categorization of teachers' digital resource applications, as well as their perceptions and experiences regarding efficacy.

Table.2.10 Research on the status of foreign digital education resources

Sources	Research contents
(Pepin, Choppin, Ruthven	Research indicates that mathematics teachers in Western countries predominantly access extensive open-access digital educational resources online, including electronic lesson plans, instructional videos, and teaching software. Nevertheless, the

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Sources	Research contents
& Sinclair, 2017)	abundance of available materials often poses challenges in effectively evaluating and selecting resources that align with specific pedagogical objectives and contextual teaching requirements.
(Admiraal, Lockhorst, Smit & Weijers, 2013)	Research indicates that teachers predominantly utilize conventional technologies, with computers, electronic whiteboards, virtual learning environments, and presentation software being most prevalent. In contrast, more advanced or innovative technological applications remain relatively uncommon in educational practice.
(Wang, Tigelaar & Admiraal, 2019)	A survey of 462 teachers across 25 rural schools examined digital education resource utilization patterns. Results indicate frequent usage of electronic lesson plans and multimedia courseware, while e-books/journals, specialized software/tools, and multimedia teaching materials were less commonly employed. Teacher video cases and online course applications demonstrated moderate adoption rates.
(Celik S, Aytin K, 2014)	The study reveals that English teachers in Turkey generally perceive digital educational resources as effective tools for enhancing students' learning motivation, improving their attitudes toward English acquisition, and developing language expression skills. While these educators express positive attitudes toward technology-integrated instruction and confidence in their digital literacy competencies, infrastructural constraints—particularly limited access to computers and reliable internet—frequently hinder effective implementation of digital media in classroom teaching.
(McMartin, Iverson, Wolf, 2018)	Findings indicate that teachers generally perceive the Internet as an unreliable source for acquiring instructional materials, primarily due to difficulties in selecting appropriate digital education resources, which subsequently engenders distrust toward such resources.

2.3.3 Research on The Influencing Factors of The Applied of Digital Education Resources for Teachers

Domestic research on factors influencing teachers' digital education resource utilization identifies three primary dimensions: (1) individual characteristics (teaching experience, professional rank, and educational background), (2) professional competencies (digital resource application ability and self-efficacy), and (3) external support systems (financial

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investment, resource quality, network infrastructure, and institutional support).

Table.2.11 Applied research on domestic digital education resources

Sources	Research contents
(CAI, Yin & Chen, 2021)	This national study of 2,942 primary and secondary school teachers across 31 provinces identified four key determinants for effective digital education resource utilization: (1) resource quality, (2) teacher self-efficacy, (3) school implementation climate, and (4) institutional support. Furthermore, significant variations emerged across geographical regions, academic levels, and subject disciplines regarding these influential factors.
(Lu Yi, Dai Longmei, 2016)	The study reveals significant variations in digital education resource utilization patterns among teachers: (1) Educators with senior professional titles demonstrate greater willingness to employ digital resources for instructional enhancement; (2) Primary school teachers report more positive perceptions of resource effectiveness, whereas secondary school teachers exhibit higher usage frequency; (3) Mandatory usage requirements appear to exert negligible influence on actual adoption rates.
(Hu Chao, Chen Yan, Wu Di, Lu Chong, 2013)	While information hardware infrastructure and network accessibility constitute the most critical determinants of digital education resource implementation in instructional settings, teacher competency in resource utilization remains equally pivotal. This is evidenced by the persistently low adoption levels observed in certain ethnic minority regions, despite adequate hardware and network provisions.
(Bao & Liu, 2011)	The study identifies three primary determinants of regional disparities in digital education resource adoption across China: (1) variations in educational expenditure prioritization, (2) differences in student population demographics, and (3) uneven regional economic development.
(Yang, 2017)	The analysis reveals two key findings regarding teachers' use of educational technology: First, significant gender differences exist in technology adoption frequency among senior teachers, while higher educational attainment correlates positively with increased usage. Second, professional development activities—including technology training, peer mentoring, demonstration lessons, and school-based research—show varying degrees of effectiveness in promoting technology

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Sources	Research contents
	integration.
(Zhang Yi, Liu Xiaoli, Fan Fulan& Zhou Ping Yinghong, 2015)	The findings indicate that both teacher- and school-level factors significantly influence teachers' technology integration practices. At the individual level, teachers' technological proficiency and attitudes toward educational technology adoption emerge as critical determinants. Institutionally, the content and quality of school-provided technology training constitute the most influential factor.
(Lu, Yin, Li & Li, 2020)	This study examined digital education resource application competencies among 1,400 rural school teachers. Results revealed that both individual characteristics (including educational background, teaching experience, and technology training participation) and school-level factors (particularly the frequency of school-based professional development) significantly influenced teachers' digital resource utilization capabilities.
<p>International studies have extensively investigated factors influencing teachers' digital education resource utilization, examining both intrinsic and extrinsic determinants. Regarding intrinsic factors, research indicates that pedagogical experience, attitudes toward technology integration, and self-efficacy significantly affect teachers' digital resource adoption.</p>	
Table.2.12 Applied research on foreign digital education resources in terms of internal factors	
Sources	Research contents
(Mueller, Wood, Willoughby, Ross& Specht , 2008)	The study reveals that teaching experience does not significantly influence technology integration practices, whereas teachers' computer attitudes emerge as a critical determinant of successful pedagogical technology adoption.
(Howley,2011)	A comparative analysis of 157 rural and 357 urban teachers revealed that rural educators demonstrated more favorable attitudes toward technology integration. Furthermore, their technological attitudes, readiness for implementation, and perceived effectiveness of educational technology showed significant positive correlations with technology-integrated

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Sources	Research contents
	instructional practices.
(Petko,2012)	A survey of 357 Swiss secondary school teachers revealed significant positive correlations between three key factors: (1) technological willingness, (2) ICT competencies, and (3) effective implementation of digital educational resources.
(Mohamadi,2015); (Lai, Hsiao & Hsieh, 2018)	This study investigated the motivational factors influencing American high school teachers' adoption of digital educational resources. The analysis identified three primary drivers: (1) performance expectancy, (2) content accessibility, and (3) multimedia interactivity, which collectively shape teachers' implementation decisions.
(Scherer, Siddiq& Teo, 2015)	The study revealed significant associations between teachers' instructional technology integration and two key factors: (1) a positive correlation with self-efficacy beliefs, and (2) an inverse relationship with age.
	External factors mainly focus on policy support, Internet access, information technology training, quality of digital education resources and student factors.

Table.2.13 Applied research on foreign digital education resources in terms of external factors

Sources	Research contents
(Howley,2011)	The analysis revealed no statistically significant association between school remoteness or socioeconomic status and levels of teacher technology integration.
(Badia, Meneses, Sigalés & Fàbregues, 2014)	Teachers' perceived benefits of ICT integration significantly influence classroom technology adoption, while institutional factors (school location, professional development opportunities, and technological infrastructure) serve as key predictors of these benefit perceptions.
(Mohammadi,2015)	The study demonstrates that institutional evaluation mechanisms significantly mediate teachers' preferences in adopting digital educational resources.
(Mtebe,2014)	The primary barriers to digital education resource integration include: (1) inadequate hardware and Internet infrastructure, (2) limited bandwidth capacity, (3) absence of supportive policies,

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Sources	Research contents
	and (4) insufficient technological pedagogical skills.
(Haler,2011)	The study identified several key barriers to teachers' classroom integration of digital education resources: (1) technological infrastructure issues (particularly computer malfunctions), (2) students' limited digital literacy, and (3) insufficient collaborative competencies among learners.
(Celik,2014)	The study revealed that Turkish EFL instructors perceive digital educational resources as effective tools for: (1) enhancing student motivation, (2) fostering positive language learning attitudes, and (3) developing linguistic competencies. While teachers reported enthusiasm for technology-enhanced instruction and confidence in their digital literacy skills, frequent technical failures (hardware/network disruptions) significantly impeded practical implementation.
(Howley,2007)	Technology integration encounters four primary challenges: (1) technical constraints, (2) temporal limitations, (3) inadequate institutional support, and (4) educator reluctance, with successful implementation contingent upon teachers' technological maintenance competencies.

2.3.4 Research on the Intention to Use Digital Education Platform

Academic investigations into digital education platform adoption intentions predominantly build upon Davis' Technology Acceptance Model (TAM), incorporating additional variables from complementary theoretical frameworks. International scholars have significantly contributed to this evolving paradigm:

(Roca, Chiu & Martínez, 2006) extended TAM by integrating the Expectation-Confirmation Model and user satisfaction theory, analyzing 172 samples to identify seven critical determinants of continuous online learning intention: information quality, perceived usefulness, system quality, confirmation expectations, service quality, computer self-efficacy, and user satisfaction.

(Lee, 2010) advanced this line of inquiry by synthesizing immersion theory with (Bhattacharjee, 2001)expectation-confirmation framework. Through examination of 363 web-based learning cases, the research established a hierarchical influence structure, with user

satisfaction exhibiting primary impact on usage intention, followed by secondary factors including subjective norms, attitudes, perceived behavioral control, perceived usefulness, and concentration levels.

Lin and Wang (2012) proposed a multidimensional integration model combining Task-Technology Fit, Expectation-Confirmation, and Information Systems Success theories. Their framework categorizes system influences into three core dimensions - information quality, knowledge quality, and system quality - demonstrating the joint significance of system characteristics and perceived fit in shaping online learning expectations.

Domestic scholarship parallels these developments through contextualized adaptations. (Xian, 2015) augmented TAM with workplace experience, media richness, and self-efficacy variables, revealing four significant predictors of platform adoption: media richness, self-efficacy, perceived usefulness, and prior experience. (Qian Ying,2015) further established the tripartite influence of course confirmation levels, perceived enjoyment, and perceived usefulness on user satisfaction.

Recent theoretical syntheses employ UTAUT2 to examine diverse contexts including:

Student adoption of Facebook-based learning (Moghavvemi, Paramanathan & Md Rahin, 2017)

Faculty MOOC acceptance determinants (Tseng, LinWang& Liu, 2022)

This evolving research paradigm demonstrates progressive theoretical integration, moving from basic technology acceptance toward comprehensive models that account for cognitive, affective, contextual, and system-quality dimensions in digital education environments.

2.3.5 Applied Research of The Theory of Intention to Use

Since Ajzen's introduction of the Theory of Reasoned Action (TRA), scholarly research has systematically expanded and refined behavioral intention models, with subsequent studies adapting and integrating these theoretical frameworks to investigate technology adoption across diverse industrial contexts and demographic groups.

International scholars have extended behavioral intention models through context-specific adaptations:(Erica, Saliba & Wiener, 2019)operationalized the Theory of

Planned Behavior (TPB) to examine determinants of Traditional Chinese Medicine adoption among anxiety patients.(Albashrawi & Motiwalla, 2019) augmented the Technology Acceptance Model (TAM) with personalization and privacy constructs to analyze mobile banking adoption.(Sugeng, Sri& Gancar, 2019) enriched TAM by incorporating affective components (pleasure, gender differences), establishing their significant influence on e-wallet adoption alongside perceived usefulness and ease of use.Wang (2020) employed multi-method analysis (fuzzy-set/structural equation modeling) to identify five key determinants of bike-sharing adoption: environmental conditions (weather), user habits, satisfaction levels, service quality, and perceived utility.

Domestic scholarship has extended technology adoption research through contextualized model integration: Xu (2019) incorporated perceived risk and innovation characteristics into the Unified Theory of Acceptance and Use of Technology (UTAUT) framework to examine third-party payment adoption in network finance contexts.Zhang (2020) applied dual theoretical lenses (TAM-UTAUT integration) to investigate hospitality employees' online learning platform adoption determinants.Wang and Fang (2019) synthesized UTAUT with trust theory and the Information Systems Success Model to analyze public acceptance of internet healthcare platforms.

These studies collectively demonstrate the prevailing scholarly approach of: Utilizing TAM and UTAUT as foundational frameworks. Conducting domain-specific adaptations through: a) Additional construct incorporation. b) Industry-characteristic integration. c) Multi-model hybridization.

2.4 Research Review

From the theoretical model presented above, it is evident that the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) is more appropriate for investigating teachers' adoption of digital education platforms, based on the following rationale.

First, UTAUT2 is formulated from a consumer-oriented perspective rather than a mandatory user (e.g., employees or organizational users) standpoint. Since teachers' adoption of digital education platforms is primarily voluntary, their willingness plays a crucial role in

determining actual usage. While external factors such as institutional requirements may influence platform adoption, teachers—as the primary facilitators of classroom instruction—retain significant autonomy in their decision-making.

Second, UTAUT2 incorporates hedonic motivation, which is highly relevant to the use of digital education platforms. For instance, these platforms often integrate multimedia elements (e.g., audio, video, and animations) that enhance student engagement and learning enjoyment. Such features underscore the importance of intrinsic motivational factors in teachers' adoption behavior.

Given these considerations, this study adopts UTAUT2 as the theoretical framework to examine teachers' behavioral intentions toward digital education platforms. The model will be adapted to align with the specific contextual and background characteristics of teachers' platform usage, thereby constructing a tailored framework for analyzing influencing factors. Subsequently, empirical research will be conducted to validate the proposed model.

Furthermore, an extensive review of existing literature reveals that research on technology acceptance and behavioral intention has reached a relatively mature stage both domestically and internationally. However, most studies on digital education platforms have predominantly focused on higher education and commercial applications, with college students as the primary research subjects. Notably, scant scholarly attention has been paid to the adoption of online education platforms by rural teachers.

In reality, with the nationwide promotion of open educational resource platforms for basic education, coupled with the increasing emphasis on teachers' professional development and lifelong learning, rural teachers are emerging as a critical user group for digital education platforms. Therefore, investigating the behavioral intentions of rural primary and secondary school teachers regarding online education platforms holds significant theoretical and practical value.

Building upon the UTAUT2 theoretical framework, this study will specifically examine rural teachers' intention to adopt digital education platforms, addressing a notable gap in the current literature.

2.5 Conceptual Framework Diagram

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Building upon the UTAUT2 framework, this study adapts the model to align with the contextual realities of digital education platform adoption among rural teachers in China, thereby enhancing its explanatory power.

2.5.1 Determination of The Dependent Variables

Consequently, numerous studies have adopted behavioral intention as the sole dependent variable in technology acceptance research. For instance, Sharif (2019) examined the acceptance of learning management systems with behavioral intention as the key outcome, while Chao (2019) employed the same approach to investigate students' adoption of mobile learning. Similarly, Dajani (2019) analyzed influencing factors using behavioral intention as the dependent variable.

However, both the original UTAUT and its extended version (UTAUT2) incorporate both behavioral intention and actual usage behavior as dependent variables. Empirical examples include Raman & Don (2013), who assessed Moodle acceptance using these dual indicators, and (Tseng, LinWang& Liu, 2022), who applied the same framework to evaluate teachers' adoption of MOOCs.

Measuring actual usage behavior necessitates stringent control over experimental conditions, temporal factors, and participant selection. Given that individual usage behavior is fundamentally driven by behavioral intention (Ajzen, 1985), this study operationalizes actual usage behavior as the dependent variable in its measurement model.

2.5.2 Determination of Independent Mediating Variables And Observable Variables

The UTAUT2 framework was originally designed for online consumer contexts, where price value significantly influences purchasing behavior. However, since teachers' adoption of digital education platforms is typically not price-sensitive, this study excludes price value as a core variable.

Regarding habit, prior research suggests it reflects past behavior (Kim, 2005). In UTAUT2, habit is measured by items such as "I am addicted to using..." or "I must use...",

whereas this study focuses on behavioral intention (e.g., "I plan to continue using..."). Preliminary interviews with primary and secondary school teachers revealed conceptual overlap between habitual use and behavioral intention. After consultation with advisors and the research team, habit was likewise excluded.

The final model incorporates the following constructs:

Independent variables: Performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, teacher innovativeness, perceived trust, and TPACK (Technological Pedagogical Content Knowledge) ability.

Mediating variable: Behavioral intention.

Additionally, 26 supplementary variables were considered (e.g., perceived usefulness, relative advantage, extrinsic motivation, job-fit, outcome expectations, perceived ease of use, social factors, system quality, service quality, etc.), encompassing dimensions from prior technology acceptance studies.

2.5.3 Determination of The Moderating Variables

The UTAUT2 framework incorporates three background variables: gender, experience, and age. In the context of teachers, teaching experience often serves as a proxy for both age and professional expertise. Empirical evidence indicates that teachers with varying years of experience demonstrate significant differences in performance expectancy (Wang, Tigelaar & Admiraal, 2019). Furthermore, research by (Padilla-Meléndez, del Aguila-Obra & Garrido-Moreno, 2013) reveals that gender significantly moderates multiple dimensions, including performance expectancy, social influence, facilitating conditions, and hedonic motivation.

Based on these findings, this study operationalizes teaching experience and teacher gender as both moderating variables and latent variables in the research model.

2.6 Measurement of The Core Variable

2.6.1 Performance Expectation

(Davis, 1989); increase (Davis, 1989) (Davis, Bagozzi & Warshaw, 1989); (Thompson,

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Higgins, & Howell, 1991); (Moore & Benbasat, 1991); (Compeau & Higgins, 1995),(Compeau, Higgins & Huff, 1999).

Performance Expectancy (PE) is defined as the extent to which individuals believe that using an information technology or system will enhance their job performance or effectiveness (Venkatesh, Morris, Davis & Davis, 2003). This construct reflects anticipated improvements in time efficiency, productivity, and output quality when adopting a particular technology. (Venkatesh, Morris, Davis & Davis, 2003) conceptualize performance expectancy through five key dimensions derived from established theoretical frameworks: (1) Perceived Usefulness (Technology Acceptance Model-TAM): The degree to which users believe a system will enhance their job performance (Davis, Bagozzi & Warshaw, 1989), including: Accelerating task completion; Increasing productivity and efficiency; Improving overall work performance. (2) Extrinsic Motivation (Motivational Model - MM): The degree to which technology use is driven by external rewards such as: Career advancement opportunities; Salary increases; Job performance recognition (Davis, Bagozzi & Warshaw, 1989). (3) Job-fit (Model of PC Utilization - MPCU): The perceived alignment between technology capabilities and job requirements (Thompson, Higgins, & Howell, 1991), including: Enhancement of work outputs; Improvement in work efficiency; Overall contribution to job performance. (4) Relative Advantage (Innovation Diffusion Theory- IDT): The perceived superiority of the technology compared to alternatives (Moore & Benbasat, 1991), manifested through: Improved work quality; Enhanced productivity; Greater operational efficiency. (5) Outcome Expectations (Social Cognitive Theory - SCT): The anticipated benefits of technology adoption (Compeau & Higgins, 1995) (Compeau, Higgins & Huff, 1999), including: Time savings; Improved work quality and capability; Increased likelihood of recognition and compensation.

In this study, performance expectation refers to the advantages such as teachers who use a digital education platform that can help them improve their work efficiency.

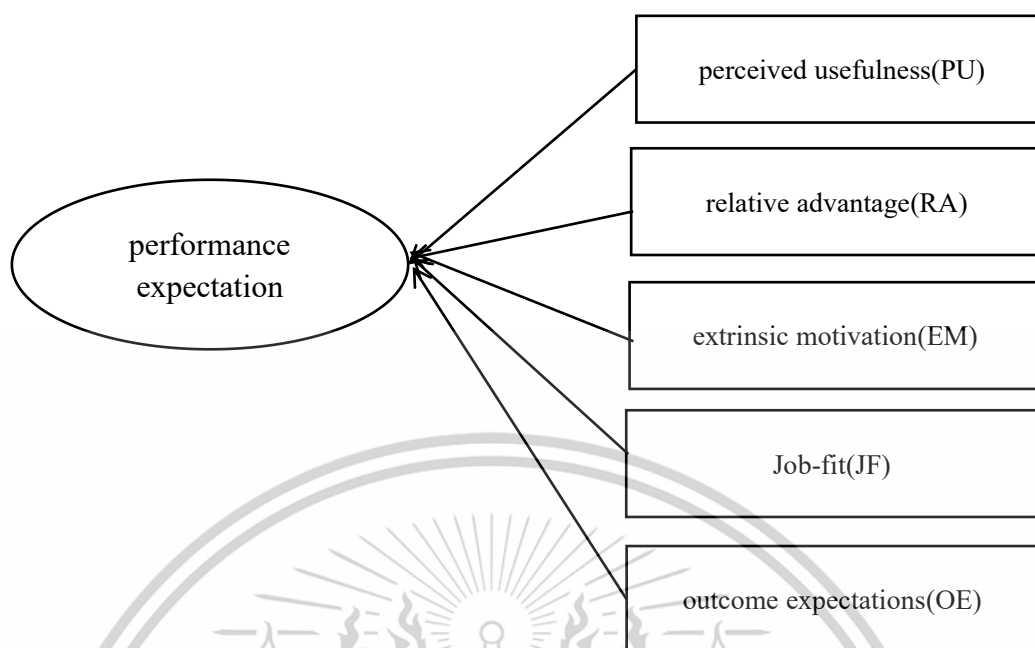


Figure.2.7 Performance Expectation Model

2.6.2 Effort Expectation

Perceived Ease of Use (PEOU) from the Technology Acceptance Model (TAM/TAM2), which reflects the degree to which users believe a system can be operated effortlessly (Davis, 1989); (Davis, Bagozzi & Warshaw, 1989).

System Complexity derived from the Model of PC Utilization (MPCU), representing the perceived difficulty in understanding and operating a technology (Moore & Benbasat, 1991).

Ease of Use in the Innovation Diffusion Theory (IDT), which captures the subjective assessment of how easily an innovation can be adopted (Moore & Benbasat, 1991).

While PEOU and Ease of Use share conceptual similarities, System Complexity inversely correlates with usability—lower complexity enhances ease of use. In the context of this study, EE pertains to consumers' perceptions regarding the usability of digital education platforms, emphasizing the importance of minimizing cognitive and operational barriers to facilitate adoption.

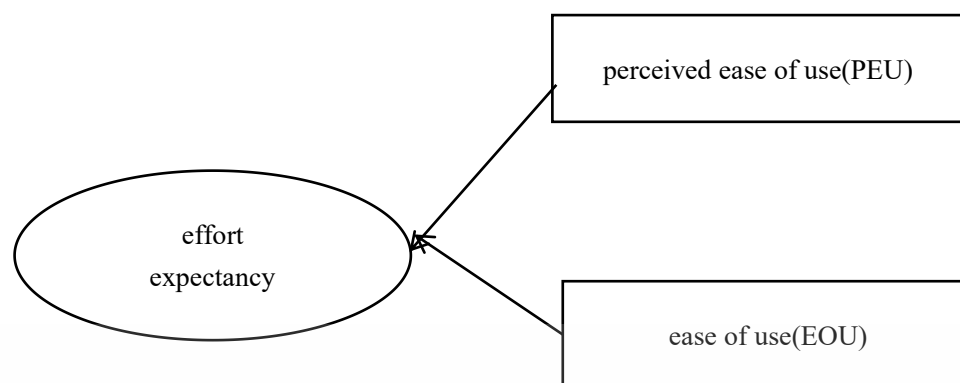


Figure.2.8 Effort Expectation Model

2.6.3 Social Influence

Social Influence (SI), rooted in psychological theory, refers to the phenomenon whereby social forces shape individuals' beliefs, attitudes, emotions, and behaviors (Peng Hongxia, 2016). (Deutsch & Gerard, 1955) distinguish two primary forms of social influence:

Normative Social Influence – driven by the desire for social approval and acceptance.

Informational Social Influence – where individuals rely on others' knowledge to make informed decisions.

(Kelman, 1961) further delineates three stages through which social influence operates: compliance (superficial behavioral change), identification (adoption due to group affiliation), and internalization (genuine belief integration).

Within the Unified Theory of Acceptance and Use of Technology (UTAUT) model, SI is defined as the extent to which individuals perceive that significant others believe they should adopt a new technology (Venkatesh, Morris, Davis & Davis, 2003). This construct integrates three key dimensions:

Subjective Norm (TRA/TAM2/TPB/DTPB/C-TAM-TPB models) – the perceived social pressure to adopt a technology (Ajzen & Fishbein, 1975); (Taylor & Todd, 1995a).

Social Factors (MPCU model) – institutional and interpersonal influences, such as peer usage, supervisor support, and industry trends (Thompson, Higgins, & Howell, 1991).

Public Image (IDT model) – the belief that technology adoption enhances one's social status (Moore & Benbasat, 1991).

This material is protected by copyright law. Social influence operates through social norms, which function as implicit behavioral

guidelines. While adherence is often voluntary, deviations may trigger social sanctions (Policy, 2005). In technology adoption research, SI plays a critical role, particularly in early adoption phases when users lack personal experience and rely on external cues. Empirical studies confirm that peer and superior endorsements significantly accelerate system diffusion (Taylor & Todd, 1995a).

Social Influence in Digital Education Platforms

Given that digital education platforms in China are still in the diffusion stage, SI is a crucial determinant of user acceptance. Consumers' adoption intentions are shaped by key referents—family, friends, colleagues, and community members. If these groups endorse digital education platforms, individuals are more likely to adopt them (Tan & Leby Lau, 2016); (Sung, Jeong, Jeong & Shin, 2015). Additionally, during the initial adoption phase, users often emulate the attitudes of their social circles, which can either facilitate or hinder acceptance (Thomas, Singh & Gaffar, 2013).

For educators, perceived benefits—such as enhanced classroom engagement and student motivation—can foster institutional support, encouraging wider adoption among peers and administrators. Thus, SI not only influences individual decisions but also drives collective adoption within educational environments.

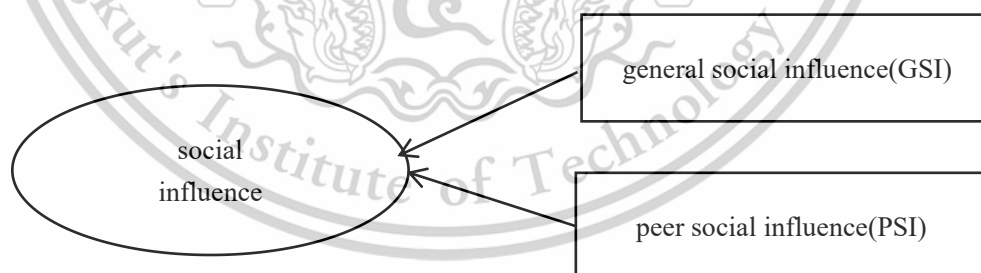


Figure.2.9 Social Influence Model

2.6.4 Facilitating Conditions

Facilitating Conditions (FC) refer to the organizational and technological infrastructure that individuals perceive as supportive for system use, encompassing both available resources and technical assistance necessary for adoption (Venkatesh, Morris, Davis & Davis, 2003).

This construct reflects the extent to which users believe their environment provides adequate

support for technology utilization, including assistance in resolving potential challenges.

Theoretical foundations of FC integrate three key dimensions:

Perceived Behavioral Control (TPB/DTPB/C-TAM-TPB models) – The individual's assessment of internal and external constraints affecting technology adoption, such as resource availability, prerequisite knowledge, and operational proficiency (Ajzen, 1991); (Taylor & Todd, 1995a).

Facilitating Factors (MPCU model) – External enablers, including institutional support, technical guidance, and specialized assistance (Thompson, Higgins, & Howell, 1991).

Compatibility (IDT model) – The degree of alignment between an innovation and users' existing values, needs, and experiences (Moore & Benbasat, 1991).

Facilitating Conditions in Digital Education Platforms

In this study, FC pertains to consumers' perceptions regarding the prerequisites for adopting digital education platforms, including:

Prior knowledge and operational skills required for platform usage.

Availability of necessary resources (e.g., devices, internet access).

Institutional or technical support to address potential challenges.

A robust facilitating environment enhances adoption likelihood by reducing barriers and ensuring users feel equipped to utilize the technology effectively.

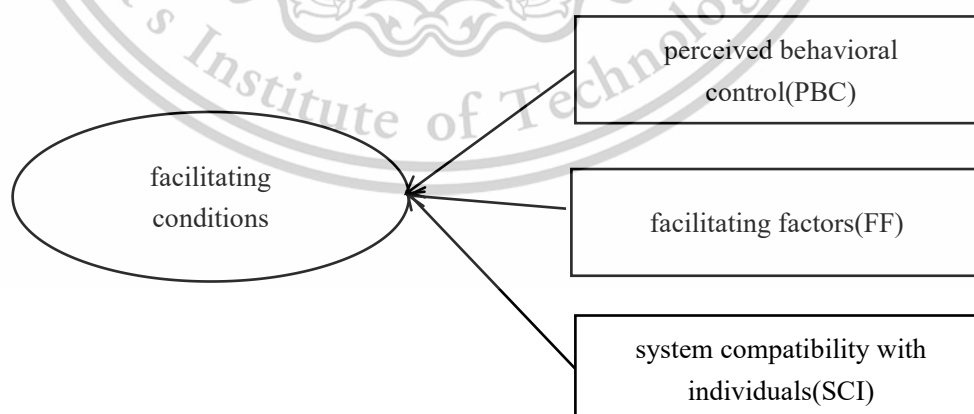


Figure.2.10 Facilitating Conditions Model

2.6.5 Hedonic Motivation

The concept of entertainment motivation (Hedonic Motivation) was first proposed by

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Atkinson and Lieberman, and then went through different stages. The earliest concept of entertainment is a subjective feeling, derived from the communication between people and computer; Barnett (1990) then put forward a new view on the concept of entertainment, that entertainment is one of human characteristics, rather than simple personal motivation, its cognitive characteristics should be relatively stable. In the second year, Barnett put forward a new definition of entertainment, including two kinds of W: first, from the characteristics of entertainment, entertainment is the stability of the individual itself and does not change with the change of the surrounding environment; the second, entertainment is the state caused by the interaction between individuals and the environment, which will change with the change of the surrounding environment over time. Later, Webster and Martocchio (Webster & Martocchio, 1992) developed the personal computer entertainment scale based on Barnett research, which showed that more entertaining users showed high emotional response and achieved high work performance when using computers. With the continuous development of the concept of entertainment, many scholars began to apply entertainment to the research of users' use behavior. Moon and Kim (Moon & Kim, 2001) based on the basis of previous literature, that is, users can bring subjective entertainment through specific behavioral conditions. Based on the technology acceptance model and its expansion model, they introduced the concept of perceptual entertainment for the first time (as shown in Figure 2.10), and proposed a dimensions of consideration: user attention, user curiosity and user enjoyment. User Attention (User Attention) refers to the user in the process of using the information system, if in an interesting state, its attention will focus on the action and filter the impact of the surrounding environment. User curiosity (User Curiosity): it means that in the process of interacting with the information system, the user arouses its curiosity and urges it to continue to explore. User enjoyment (User Enjoyment): it refers to the pleasure of users interested in an information system over the interaction itself rather than the surrounding environment.

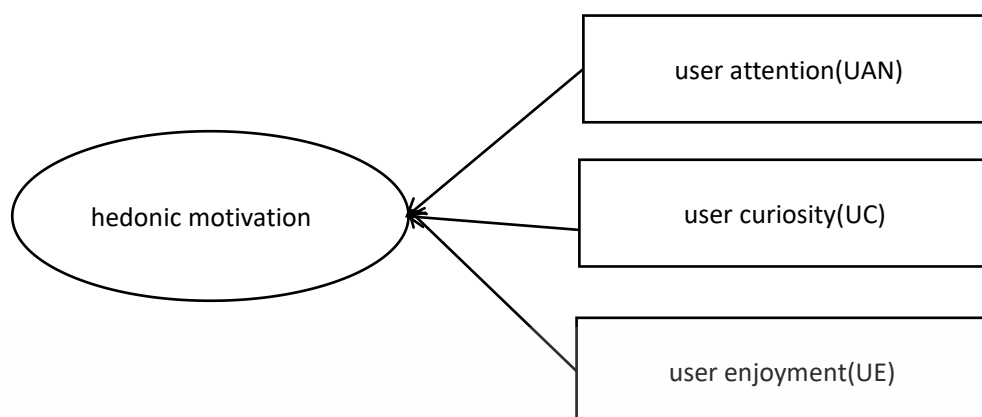


Figure.2.11 Hedonic motivation Model

2.6.6 Teacher Innovativeness

Innovativeness represents a critical driver of innovation adoption behavior and serves as a central focus in diffusion research. (Roehrich, 2004) established a tripartite classification of innovativeness: (1) Firm Innovativeness: Organizational capability for agile development and new product commercialization. (2) Product Innovativeness: The degree of technological novelty and development intensity embodied in innovations. (3) Consumer Innovativeness: The propensity of individuals to adopt new products earlier, more frequently, and with greater speed than peers (Midgley & Dowling, 1978).

This study specifically examines user innovativeness, focusing on individual adoption behaviors rather than organizational or product dimensions. The construct captures how personal characteristics influence the willingness to embrace technological innovations, particularly in the context of digital platform adoption.

Table.2.14 Definition of the Consumer Innovativeness

Sources	Definition of the Consumer Innovativeness
(Midgley & Dowling, 1978)	Consumer innovativeness represents an individual's capacity and propensity to adopt novel ideas or products. Research has established three distinct conceptual dimensions: (1) Innate Innovativeness: Reflects a person's inherent predisposition toward novelty-seeking behavior. (2) Actualized Innovativeness: Manifests as demonstrated adoption behavior of new products/services. (3) Domain-Specific

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Sources	Definition of the Consumer Innovativeness
	Innovativeness: Concerns innovation adoption within particular product categories or technological domains.
(Goldsmith & Hofacker, 1991)	Innate innovativeness refers to individuals' inherent psychological propensity to embrace novel products or ideas. As a fundamental personality trait, it manifests through three key dimensions: (1) internal cognitive dispositions that remain relatively stable over time; (2) distinctive perceptual frameworks for processing innovative stimuli; and (3) consistent behavioral tendencies toward early adoption. This construct differs from learned or situational innovative behaviors by virtue of its congenital nature and cross-contextual persistence.
(Rogers and Shoemaker, 1971)	Actualized innovativeness manifests through observable adoption behaviors, specifically characterized by two key dimensions: (1) temporal precedence in acquiring innovations relative to peers within one's social network, and (2) proactive pursuit of novel product information. This behavioral construct operationalizes innate innovative tendencies through measurable marketplace actions, distinguishing itself from potential innovativeness by emphasizing demonstrated adoption patterns rather than latent dispositions.
(Roehrich, 2004)	Domain specific innovativeness describes an individual's cognition and acceptance of a new product in a specific field.
(Huang Jiasheng ,1994)	The concept of consumer innovativeness has emerged from extensive scholarly discourse as a multidimensional construct that captures individuals' predisposition toward innovation adoption. This theoretically-grounded framework serves two critical functions: (1) it characterizes stable individual differences in novelty-seeking tendencies, and (2) provides explanatory power for varying levels of adoption willingness across consumers.
(Liu Shilan,2011)	Consumer innovativeness represents an individual's latent predisposition toward novel stimuli, characterized by three fundamental dimensions: (1) inherent innovative personality traits, (2) distinctive cognitive processing patterns, and (3) consistent behavioral tendencies. This multifaceted construct demonstrates cross-situational applicability in predicting and explaining innovation adoption behaviors across diverse contexts.

Sources	Definition of the Consumer Innovativeness
(Chen Wenpei,2014)	Consumer innovativeness is defined as an individual's inherent predisposition toward new product adoption, representing a stable psychological characteristic that influences decision-making processes. This construct has evolved into a pivotal element in consumer behavior research, demonstrating significant theoretical and practical value in explaining adoption patterns. Its importance stems from its ability to: (1) predict individual differences in innovation receptivity, and (2) serve as a fundamental determinant in various consumption contexts.

Early investigations into consumer innovativeness primarily employed psychological methodologies. Subsequent scholarly attention has significantly advanced this construct across four key dimensions: (1) theoretical foundations, (2) methodological approaches, (3) impact assessment, and (4) measurement model development.

Theoretical Foundations:Rogers (1983) identified four distinguishing characteristics of innovative consumers:Propensity to adopt novel concepts and products;Capacity to influence others' adoption decisions;Problem-solving orientation within social systems;Temporal advantage in innovation adoption.

(Roehrich, 2004) further conceptualized the construct through four psychological dimensions:(1)Stimulation seeking(2)Novelty preference(3)Decision-making autonomy(4)Uniqueness desire.

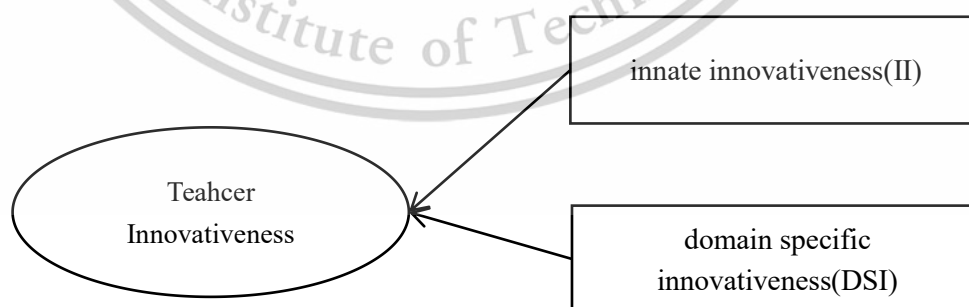


Figure.2.12 User Innovativeness Model

2.6.7 Perceived Trust

The concept of trust is abstract and multifaceted. In its literal sense, it refers to the belief This material is reserved for educational use only, not allowed for commercial use.

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in another party's honesty and reliability. As a multidisciplinary construct, trust has been extensively examined across diverse fields including sociology, psychology, economics, management, political science, and marketing. The conceptualization of trust varies significantly depending on disciplinary contexts and situational characteristics. Nevertheless, scholars generally concur that trust serves as a fundamental prerequisite for establishing transactional or exchange relationships.

Table.2.15 Definition of the Perceived Trust

Sources	Definition of the Perceived Trust
(Simmel,1990)	Trust is conceptualized as an individual's cognitive acceptance of a given reality, contingent upon the perceived reliability of its execution. In daily social interactions, this perceived congruence with reality serves as a foundational element. From a psychological perspective, trust is often characterized as both a personality trait and a relational phenomenon, with varying degrees of trustworthiness manifesting across different contexts.
(Deutsch, 1958)	Trust is conceptualized as an individual's cognitive acceptance of a given reality, contingent upon the perceived reliability of its execution. In daily social interactions, this perceived congruence with reality serves as a foundational element. From a psychological perspective, trust is often characterized as both a personality trait and a relational phenomenon, with varying degrees of trustworthiness manifesting across different contexts.
(McKnight &Chervany, 2001)	Trust is defined as an individual's attribution of benevolence, competence, and integrity to another entity. Within the domain of management studies, trust similarly reflects a subject's perceived goodwill, capability, and sincerity toward another party.
(Luhmann,1979)	Trust is a multifaceted construct that operates not only at the interpersonal level but also within national political systems and broader societal institutions. As a foundational element of social stability, economic growth, and collective progress, trust emerges from and is sustained by shared cultural knowledge, norms, and institutional standards. Consequently, it reflects individuals' reliance on these socio-cultural and regulatory frameworks. From an economic perspective, trust is conceptualized through

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Sources	Definition of the Perceived Trust
	<p>the lens of rational choice theory. It is viewed as a calculated decision-making process wherein individuals engage in repeated interactions and strategic games to maximize mutual benefits. This rational assessment involves risk mitigation, cost reduction, and the enforcement of contractual agreements, thereby fostering economic efficiency and development.</p> <p>In marketing, trust is regarded as a critical determinant of transactional relationships, facilitating cooperation and exchange between parties.</p>
(Anderson and Weitz,1992)	<p>Within the study of commitment behavior in distribution channels, trust is recognized as a critical cognitive and relational factor. It reflects a party's confidence that another entity will fulfill future obligations, thereby enabling the realization of one's own objectives through mutual support.</p>

In conclusion, online course platforms exhibit several persistent challenges, including audio-visual latency, suboptimal resolution, limited interactivity, and inefficient feedback mechanisms (Media Research, 2019). This study categorizes these deficiencies into two dimensions: system quality (pertaining to the platform's technical functionality) and relationship quality (concerning its interpersonal and communicative aspects) (Fang ,Tang , Ma & Hu, 2019).

System quality, a core construct in the Information System Success Model (Delone & Mclean, 1992), encompasses technical performance metrics including functionality, flexibility, and reliability. Empirical evidence suggests that suboptimal system quality serves as a push factor, motivating users to migrate to alternative platforms (Yang, 2012). In the context of online education platforms, manifestations of inadequate system quality — such as interface lag, audio-visual asynchrony, and cumbersome authentication processes — significantly degrade user experience. These technical deficiencies may adversely affect perceived usability and ultimately diminish users' continuance intention.

Relationship quality, a well-established construct in marketing literature, characterizes the interpersonal dynamics between users, platforms, and affiliated personnel. In this study, it specifically encompasses the perceived social connectedness and relational bonds among learners, instructors, and teaching assistants. Empirical research demonstrates that weak

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perceived connectivity (e.g., psychological distance, low intimacy) in online communities contributes significantly to user attrition (Hsieh, Chiu & Feng, 2012); (Jung & Lee, 2020a). Within educational platforms, such connectivity manifests through social interaction - when inadequate, it negatively impacts learners' sense of belonging and relational needs fulfillment, ultimately compromising engagement (Fang, Tang, Ma & Hu, 2018).

Building on (Delone & Mclean, 1992); (Delone, Mc Lean, 2003) information systems success model, (Teo, Srivastava & Jiang, 2008) developed the Model of Trust in E-Government Websites. This theoretical framework posits that trust in e-government websites comprises two key dimensions: trust in government (institutional trust) and trust in technology (technical trust). The model further establishes that such trust directly influences users' perceptions of three critical quality variables: information quality, system quality, and service quality. These quality dimensions subsequently affect both user satisfaction and continuance intention.

Satisfaction serves as a key antecedent of consumer trust (Rasheed & Abadi, 2014), playing a critical role in fostering strong customer relationships. Empirical studies demonstrate that consumer satisfaction positively influences trust in businesses (Islam, Pitafi, Xiaobei, Rehmani, Irfan & Mubarak, 2021). Furthermore, research by Sharma and Klein (2020) reveals a significant positive correlation between perceived value and trust in online group buying, where heightened perceived value strengthens trust and encourages participation. Similarly, in e-tourism, perceived value substantially enhances trust in digital services (Masri, You, Ruangjanases, Chen & Pan, 2020). Consequently, service quality encompasses both instructors' perceived value and platform satisfaction as integral dimensions.

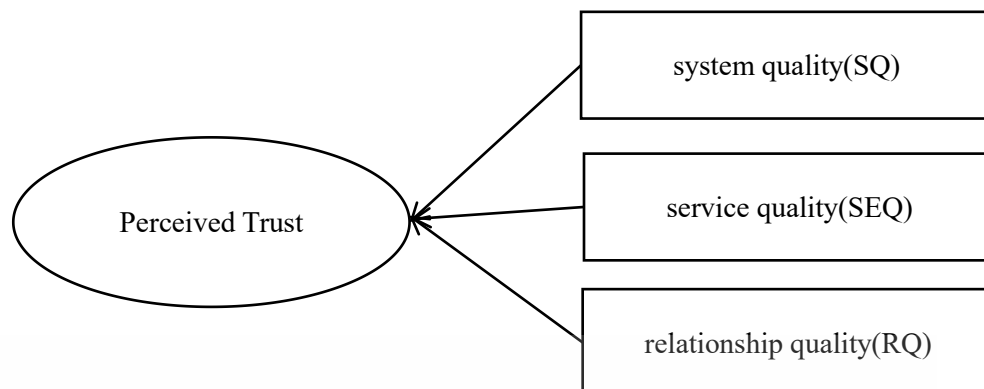


Figure.2.13 Perceived Trust Model

2.6.8 TPACK Ability

Technological Pedagogical and Content Knowledge (TPACK) represents an integrated framework encompassing three core domains of educator competence: technological knowledge, pedagogical knowledge, and content knowledge. This construct reflects educators' beliefs about the essential knowledge required to effectively implement technology-supported digital instruction (Mishra & Koehler, 2006).

Table.2.16 Definition of the core concepts of TPACK

Core Word	Definition
Technological knowledge (TK)	Educational technology encompasses the systematic application of digital tools, software, and hardware to facilitate learning objectives (Spector, 2015).
Pedagogical knowledge (PK)	It pertains to the pedagogical strategies for organizing, directing, and scaffolding student knowledge acquisition during instruction (Shulman, 1987).
Content Knowledge (CK)	It denotes the discipline-specific content knowledge comprising the core subject matter expertise within a specialized curriculum (Shulman, 1986).
Technological Pedagogical knowledge (TPK)	Technological Pedagogical Knowledge (TPK) represents the intersection of technological knowledge (TK) and pedagogical knowledge (PK), focusing on how technology mediates instructional practices (Mishra & Koehler, 2006). Exemplary applications include technology-enhanced strategies such as web-based inquiry learning and flipped classroom approaches.

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Core Word	Definition
Pedagogical Content Knowledge (PCK)	Pedagogical Content Knowledge (PCK) represents the integration of content knowledge (CK) and pedagogical knowledge (PK), embodying the critical nexus between subject matter and instructional practice (Shulman, 1987). As a core competency of effective teaching, PCK enables educators to transform disciplinary content into pedagogically appropriate forms for diverse learners.
Technological Content Knowledge (TCK)	Technological Content Knowledge (TCK) involves the strategic application of technical knowledge (TK) to optimize the representation and delivery of content knowledge (CK). This integration facilitates student comprehension, enhances conceptual clarity, and promotes deeper knowledge internalization and transfer (Mishra & Koehler, 2006).

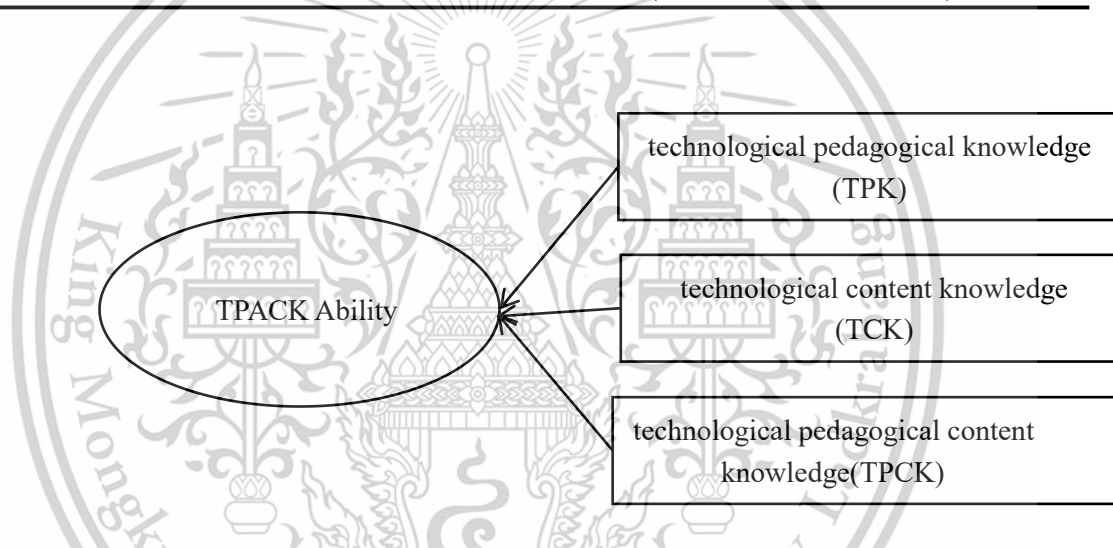


Figure.2.14 Technological Pedagogical and Content Knowledge (TPACK) Model

2.6.9 Culture

Hofstede (1980) conceptualizes culture as "the collective programming of the mind" that differentiates social groups. His foundational model initially identified four dimensions of national culture: individualism/collectivism, power distance, uncertainty avoidance, and masculinity/femininity. This framework was later expanded to include long-term orientation as a fifth dimension (Hofstede & Bond, 1988). These culturally embedded value dimensions are examined below.

Table.2.17 Definition of the core concepts of culture

Core Word	Definition
Culture	Culture represents the collective mental programming that differentiates members of one social group from another (Hofstede's,1980).
Individualism/collectivism	This dimension reflects the extent to which individuals prioritize personal goals over collective interests and prefer autonomous action over group collaboration (Srite & Karahanna, 2006).
Uncertainty avoidance	This dimension measures an individual's risk propensity, reflecting their tolerance for ambiguity and willingness to engage in uncertain situations (Srite & Karahanna, 2006). It is influenced by three key factors: adherence to established rules, willingness to change employment, and engagement in ritualized behaviors.
Power Distance	This dimension reflects societal acceptance of hierarchical power distribution and status inequalities (Srite & Karahanna, 2006). It specifically captures employees' perceptions of legitimate power differentials in organizational contexts.
Masculinity/Femininity	This dimension captures individuals' orientation toward gender role differentiation in societal and organizational contexts (Srite & Karahanna, 2006). Those endorsing masculine values prioritize achievement-oriented attributes including performance, assertiveness, career advancement, and competitiveness. Conversely, individuals favoring feminine values emphasize quality of life, interpersonal relationships, and collaborative work environments.

Cultural influences on technology acceptance remain understudied. Srite and Karahanna's (2006) seminal work examined how national cultural values moderate technology acceptance, with age, gender, experience, and voluntariness as key moderators. Their findings revealed three key insights: (1) technology acceptance models lack cross-cultural generalizability, (2) cultural values significantly moderate individual acceptance behaviors, and (3) while social norms strongly predict behavioral intention among feminine-valued, high uncertainty-avoidance individuals, masculinity/femininity only moderates the perceived ease of use-behavioral intention relationship, not the perceived usefulness-intention link.

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(Jung & Lee, 2020b) examined cross-cultural adoption of Open Educational Resources (OER) in higher education through a three-nation study (United States, Korea, Japan; N=152 educators) using the UTAUT2 model. Their analysis revealed: (1) habit consistently emerged as the strongest predictor of behavioral intention across all cultures, while (2) culture-specific determinants varied significantly — performance expectancy in Korea, social influence in Japan, and price value in the United States. The study confirmed culture's significant moderating role in OER adoption patterns.

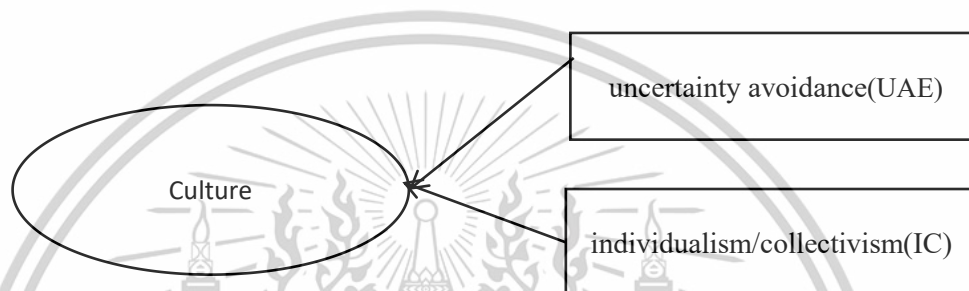


Figure.2.15 Culture Model

2.6.10 Intention to use

Intention to use refers to an individual's subjective likelihood of adopting a specific behavior, reflecting the strength of their willingness to engage in that behavior. This construct primarily captures the user's subjective perceptions, which are influenced by their attitudes and beliefs at a given level.

Table.2.18 The measure of intention to use

Source	Research Context
(Moon & Kim, 2001)	In his study, he extended the Technology Acceptance Model (TAM) and applied it to the World Wide Web context. Behavioral intention was measured across three dimensions: future usage likelihood, frequency of use, and recommendation willingness.
(Venkatesh, Morris, Davis & Davis, 2003)	In the UTAUT model, behavioral intention is measured through three key dimensions: intended, anticipated, and planned future usage. This measurement framework has gained broad scholarly acceptance and is widely employed in assessing individual behavioral intentions.

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Source	Research Context
(Keeton, Perry-Jenkins & Sayer, 2008)	He retained this measurement criterion to investigate the effects of organizational factors and individual differences on technology acceptance.
(Wang, Wu & Wang, 2009)	He further applied this measurement framework to assess user intention in the context of information stations.
(Venkatesh, Thong & Xu, 2012)	In developing the UTAUT2 model, he operationalized behavioral intention through two key dimensions: an individual's persistent usage tendency and their continuance intention.
(Zhou, 2012)	His study examined location service adoption through the UTAUT framework while incorporating privacy risk considerations. Behavioral intention was operationalized through three key dimensions: usage propensity, continuance intention, and adoption willingness.
(Sheikh, Islam, Rana, Hameed & Saeed, 2017)	In his study of social media platforms, he further examined social influence using the UTAUT2 framework.
(Yeop, Yaakob, Wong, Don & Zain, 2019)	Scholars posit that behavioral intention comprises three key elements: (1) technology usage intention, (2) technology adoption prediction, and (3) the link between behavioral intention and actual technology use. These components have driven the development of multiple theoretical models, which primarily assess factors influencing behavioral intention and establish its predictive validity for actual usage behavior.
(Tseng, Lin Wang & Liu, 2022)	
(Joo, So, & Kim, 2018)	
(Tan & Leby Lau, 2016)	

In this study, intention to use is defined as teachers' likelihood, willingness, and sustained expectation of adopting digital education platforms under feasible conditions. It encompasses both their personal predicted usage and their propensity to recommend such platforms to others in the future. Operationally, intention to use represents the subjective probability of teachers choosing to engage with digital education platforms, reflecting their adoption willingness. Furthermore, user intention serves as a critical determinant for the successful implementation and diffusion of these platforms.

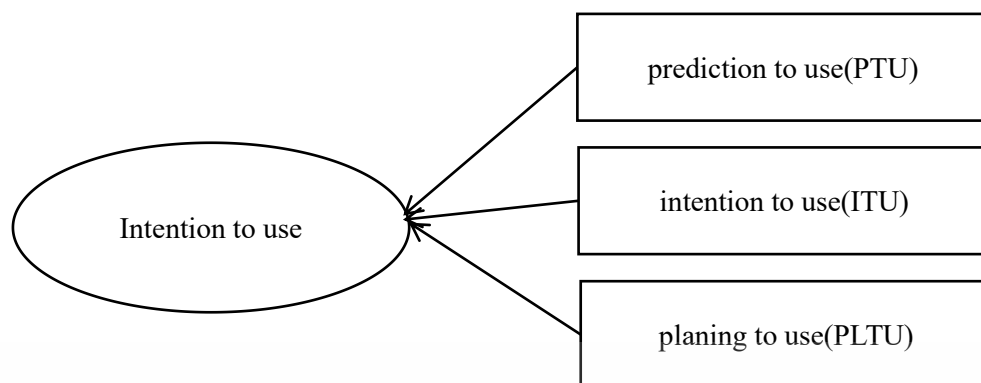


Figure.2.16 Intention to use Model

2.6.11 Behavior to Use

The Theory of Reasoned Action (TRA) establishes behavioral intention as the proximal determinant of actual behavior, where intention strength positively predicts behavioral performance (Ajzen & Fishbein, 1975). Within technology adoption research, Usage Behavior (UB) refers to users' observable interactions with information systems (Davis, Bagozzi & Warshaw, 1989); (Sun, 2010).

Current measurement paradigms include: Subjective assessment through self-report instruments (e.g., TAM questionnaires, structured interviews); Objective behavioral tracking via system log analysis (e.g., session duration, access frequency).

For this investigation, UB specifically encompasses educators': Information acquisition behaviors (searching, retrieving, browsing digital resources); Platform engagement (purchasing, instructional application, self-directed learning).

Previous research has employed various dimensions to measure technology usage behavior:

(Chen & Tang, 2006) operationalized mobile payment usage through temporal duration and frequency metrics.

(Venkatesh, Thong & Xu, 2012) measured mobile Internet service usage based on consumption frequency when validating UTAUT2.

(Sheikh, Islam, Rana, Hameed & Saeed, 2017) proposed evaluation dimensions including frequency, experience, and volume of use for social media platforms.

In this study, we define usage behavior as consumers' actual engagement with digital

education platforms, manifested through:

Adoption decisions influenced by key determinants

In this study, use behavior refers to the description of their actual use of digital education platform, namely consumers in the process of digital education platform, under the influence of the factors use decision behavior, consumers have made the decision to adopt digital education platform, through its using experience, frequency and recommendation, to reflect the consumer use of digital education platform.



Figure.2.17 Behavior to Use Model

2.7 Variable Relationship

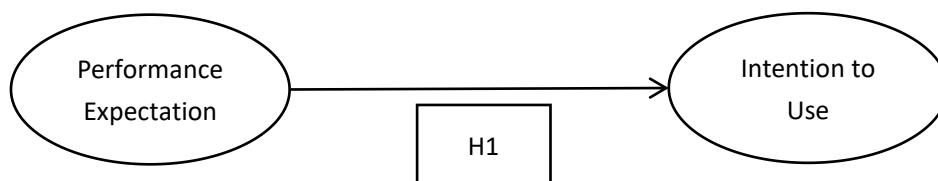
The researcher conducted a comprehensive literature review to examine the relationships among dependent, independent, and moderating variables concerning digital education platform adoption intentions. The subsequent sections systematically analyze these interrelationships.

2.7.1 Relationship Between Performance Expectation and Intention to Use

This study defines performance expectation as rural teachers' perceived degree to which digital education platforms can enhance their work performance, particularly in facilitating teaching tasks. Existing research demonstrates performance expectation's significant influence on technology adoption intentions. (Tseng, LinWang& Liu, 2022) found this construct strongly affected teachers' MOOC usage intentions, while (Engotoit,Kituyi & Moya, 2016). observed similar effects among farmers adopting mobile communication technologies for agricultural information access. Consistent with these findings, this study posits that teachers' platform adoption likelihood increases when they perceive potential performance improvements.

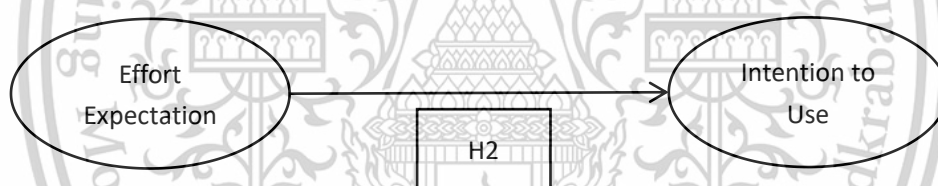
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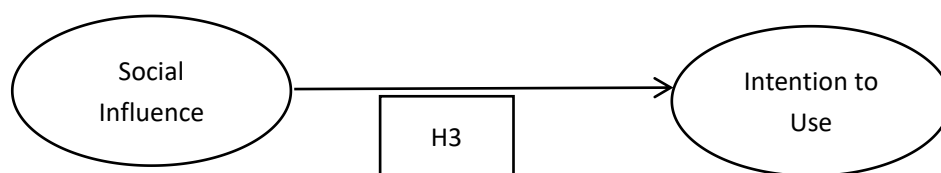
2.7.2 Relationship Between Effort Expectation and Intention to Use

This study conceptualizes effort expectation as rural teachers' perceived difficulty in (a) accessing and (b) utilizing digital education platform resources. Empirical findings on its influence remain inconsistent: while (Mtebe, Mbwilo & Kissaka, 2016) observed significant effects on Tanzanian teachers' multimedia adoption intentions, (Tseng, LinWang & Liu, 2022) found nonsignificant results for MOOC usage. This study hypothesizes that lower perceived effort requirements—particularly ease of learning platform operation—will positively predict teachers' adoption likelihood.



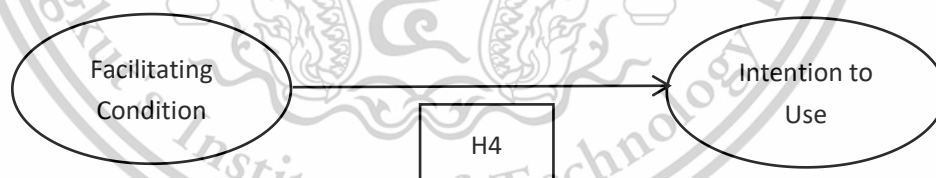
2.7.3 Relationship Between Social Influence and Intention to Use

This study defines social influence as teachers' perceived pressure from significant others regarding digital education platform adoption, encompassing school administrators, colleagues, and external experts (Zhang, Chen, & Wang, 2018). Empirical evidence consistently supports its impact: Tseng, LinWang & Liu (2022); Nandwani & Khan (2016) and Wong, Russo & McDowall (2013) demonstrated significant effects on teachers' technology adoption intentions, aligning with findings in fintech contexts (Bommer, Milevoj & Rana, 2023). We posit that stronger institutional support (e.g., leadership endorsement and peer adoption norms) will increase teachers' platform utilization.



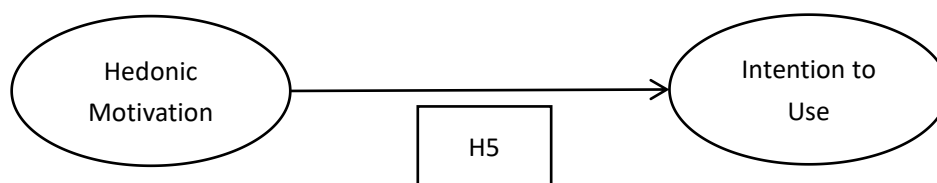
2.7.4 Relationship Between Facilitating Condition and Intention to Use

This study defines facilitating conditions as rural teachers' perceived access to institutional and personal resources enabling digital education platform implementation, encompassing: (1) technological infrastructure (hardware/software), (2) technical support availability, and (3) individual technological competence. Empirical evidence consistently demonstrates the positive relationship between facilitating conditions and technology adoption intentions, as evidenced in educational contexts by Mtebe, Mbwilo & Kissaka (2016) and Nandwani & Khan (2016), and in broader UTAUT applications by Fakhfakh, Blanchette, Plourde, Gadio, Elf, Jones, Meijering, Giguère & Légaré (2023). We posit that enhanced technical infrastructure, responsive support systems, and greater teacher technological self-efficacy will significantly increase the likelihood of platform utilization in instructional practice.



2.7.5 Relationship Between Hedonic Motivation and Intention to Use

This study conceptualizes hedonic motivation as rural teachers' perceived enjoyment derived from using digital education platforms, particularly regarding their ability to: (1) enhance classroom engagement, and (2) increase student learning interest. Empirical evidence supports the positive correlation between perceived enjoyment and technology acceptance among educators and learners (Lee, 2009); (Raman & Don, 2013). We hypothesize that rural teachers who associate digital resource usage with improved classroom dynamics and student motivation will exhibit greater adoption of these platforms in their teaching practices.



2.7.6 Relationship Between Teacher Innovativeness and Intention to Use

User innovativeness refers to users' preferences and interests for new things. Table 2.18 shows the influence of consumer innovativeness on using intention.

Table.2.19 Applied Research of the Influence of Consumer Innovativeness on Using Intention

Sources	Applied Research of the Influence of Consumer Innovativeness Using Intention
(Rogers, 1983); (E. M. Rogers, 1962)	Empirical studies indicate that innovators confront elevated risks and uncertainties when adopting novel technologies. Individuals with higher innovativeness demonstrate greater propensity to experiment with emerging technological applications. Furthermore, consumer innovativeness has been consistently shown to positively influence behavioral intentions toward technology adoption.
(Agarwal & Prasad, 1998)	The construct of consumer innovativeness was initially conceptualized within information systems research to assess individuals' propensity to adopt emerging technologies. Empirical evidence further demonstrates that innovativeness mediates the relationship between consumer attitudes and behavioral intentions, thereby indirectly influencing technology acceptance.
(Eastlick & Lotz, 1999)	Research on interactive online shopping platforms demonstrates a positive correlation between consumer innovativeness and purchasing behavior, indicating that higher levels of consumer innovativeness predict greater propensity for online shopping adoption.
(Hung, Ku, & Chang, 2003)	Research on mobile commerce adoption identifies consumer innovativeness as a significant positive predictor of WAP service usage intention.
(Im, Bayus & Mason, 2003)	This relationship aligns with the Consumer Innovativeness Framework, where innate novelty-seeking tendencies predict adoption behaviors.

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Sources	Applied Research of the Influence of Consumer Innovativeness Using Intention
(Lian & Lin, 2008)	Empirical evidence confirms that consumer innovativeness significantly influences online shopping intentions.
(Lao Kefu,2013)	Studies examining green consumption behavior consistently reveal that consumers' innovative tendencies exert a substantial impact on their intentions to engage in environmentally conscious purchasing decisions.
(Xiao , Xue & Tao, 2016)	Research on lead users' innovativeness in the new energy vehicle (NEV) context identifies three constitutive dimensions — general, domain-specific, and alternative innovativeness — each demonstrating positive effects on NEV adoption intentions.
(Wang, Wu & Zhai Yajuan, 2018)	This study develops a conceptual model of crowdfunding continuance intention, with empirical results demonstrating that platform users' consumer innovativeness significantly enhances their sustained participation intentions.
(Shao ,Wang& Zhao, 2020)	Research on shared bicycle usage demonstrates that consumer innovativeness positively influences eco-conscious utilization behaviors.

This study examines digital education platforms as technological innovations, where limited user experience and knowledge constrain comprehensive understanding. Users' interest and novelty-seeking tendencies motivate active information-seeking through digital channels, enhancing: (1) technological self-efficacy, (2) independent evaluation capacity, and (3) troubleshooting competence.

Consumer innovativeness manifests through three behavioral dispositions:

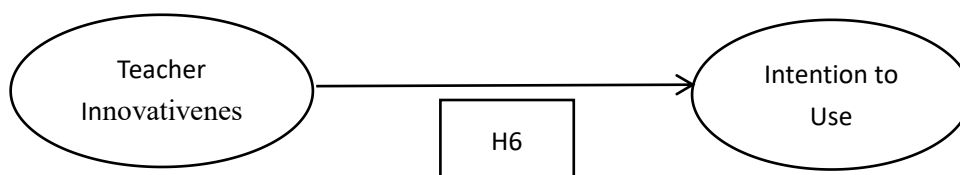
Risk tolerance - Greater willingness to adopt unproven technologies.

Exploratory motivation - Proactive engagement with novel platform features.

Temporal primacy - Earlier adoption timing than average users.

These characteristics facilitate deeper platform cognition and stronger usage intentions.

We therefore hypothesize:Teacher innovativeness positively influences on the intention to use digital education platform.



2.7.7 Relationship Between Perceived Trust and Intention to Use

Trust constitutes a psychological state characterized by positive expectations regarding another party's (1) integrity (adherence to moral principles and truthfulness), (2) competence (possession of requisite skills and knowledge), and (3) benevolence (genuine concern for mutual welfare) (Mayer, Davis & Schoorman, 1995). As a fundamental mechanism in exchange relationships, trust reduces perceived risk and enhances behavioral intentions in digital transactions (Gefen, Karahanna & Straub, 2003). Empirical evidence consistently demonstrates trust's significant positive effect on technology adoption decisions (Pavlou, 2003; McKnight, Cummings & Chervany, 1998)

Table.2.20 Applied Research of the Influence of User Trust on Using Intention

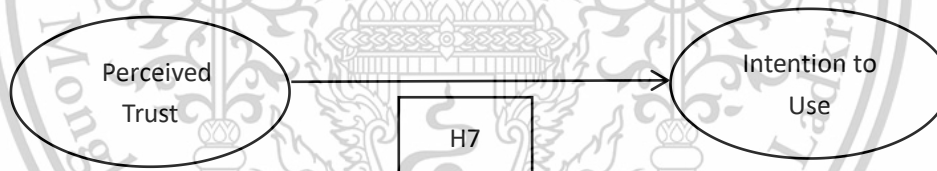
Sources	Applied Research of the Influence of User Trust on Using Intention
(Menon, Konana & Browne, 1999)	Research on electronic brokerage systems demonstrates that investor trust significantly predicts trading intention.
(Kim, Shin & Lee, 2009)	In mobile banking contexts, trust positively influences users' adoption motivation.
(Lin Jiabao, 2010)	Empirical evidence confirms that trust serves as a pivotal determinant of user adoption motivation in mobile securities trading, significantly influencing behavioral intentions.
(Zhou, Lu & Zhang, 2009)	Research on mobile commerce adoption demonstrates trust's significant positive effect on behavioral intention.
(He & Lu, 2009)	Research indicates that trust significantly enhances rural users' behavioral intentions toward mobile information service adoption.
(Shi, 2019)	Trust positively influences users' behavioral intentions to adopt academic social networking site resources.

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Sources	Applied Research of the Influence of User Trust on Using Intention
(Li & Wang, 2019)	The Technology Acceptance Model (TAM) reveals that trust directly influences consumers' online purchase intentions in social commerce contexts.
(Kanaan, AL-Hawamleh & Abulfaraj)	Empirical results confirm that trust in e-government services significantly enhances usage intention. To optimize adoption, Jordan's e-government implementation should prioritize: (1) information/system/service quality, (2) perceived privacy protections, and (3) security measures - all critical trust antecedents that subsequently increase citizen engagement.

Given the inherent uncertainties in digital education platforms, trust emerges as a critical determinant of users' behavioral intentions. Enhanced trust promotes platform adoption, whereas trust deficits may significantly impede usage intentions. Consequently, we hypothesize: Perceived trust positively influences on intention to use of digital education platform.



2.7.8 Relationship Between TPACK ability and Intention to Use

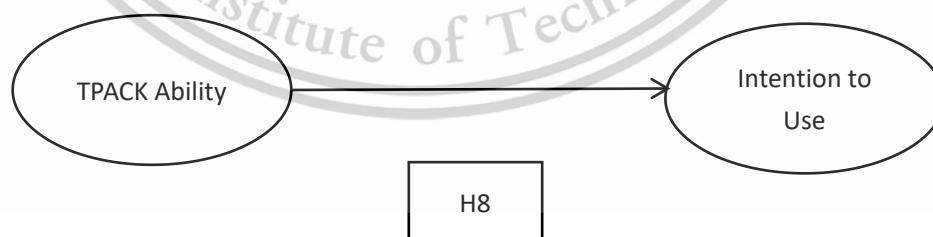
International research demonstrates that teachers' Technological Pedagogical Content Knowledge (TPACK) significantly influences their technology-integrated instructional practices, serving as a critical bridge between educators' knowledge domains and their implementation of digitally-supported pedagogy (Mishra & Koehler, 2006). The following table presents empirical evidence of TPACK's impact on technology-enhanced teaching effectiveness.

Table.2.21 The significance of TPACK ability for teachers to carry out information teaching
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Sources	Content of the Applied Research
(Keengwe, Kidd & Kyei-Blankson, 2009)	Keengwe, Kidd & Kyei-Blankson (2009) conducted interviews with 25 faculty members across diverse roles at a U.S. university, revealing that institutional support (including leadership commitment, training programs, and resource allocation) significantly influences teachers' TPACK development and subsequent technology integration willingness.
(Jimoyiannis, 2010)	Jimoyiannis (2010) empirically establishes that teachers' TPACK development positively predicts their technology integration intentions.
(Keengwe, Kidd & Kyei-Blankson, 2009)	Keengwe, Kidd & Kyei-Blankson(2009) demonstrated that TPACK proficiency facilitates effective technology integration in instructional practices.
(Hao & Lee, 2016)	Educators emphasizing instructional performance metrics and computer-mediated classroom management demonstrate lower risk propensity in deviating from conventional pedagogies (Hao & Lee, 2016).
(Saeed Al-Marooif, Alhumaid& Salloum, 2021)	The findings demonstrate a significant positive influence of instructors' technological pedagogical content knowledge (TPACK) on their technology adoption intentions.

The data presented in the table reveal that TPACK competence significantly influences teachers' adoption of information technology. Consequently, this study hypothesizes that TPACK has a significant positive effect on intention to use of digital education platforms.



2.7.9 Relationship Between Facilitating Condition and Behavior to use

Facilitating conditions refer to the extent to which organizational and technical infrastructure supports the adoption of information technology (IT) or related systems. These

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conditions primarily encompass operational capabilities and environmental equipment readiness. Additionally, they include an individual's perception of the technical assistance available from social groups or institutions when adopting new IT, which is defined as a contributing factor. Empirical evidence consistently demonstrates a significant positive relationship between facilitating conditions and technology usage behavior (as illustrated in the table below).

Table.2.22 The existing study on the influence of facilitating condition on using behavior

Sources	Content of the Applied Research
(Zhou , Lu & Zhang, 2009)	His in-depth analysis of mobile banking adoption revealed that facilitating conditions significantly influence users' behavioral acceptance.
(Wu, Yu, & Weng 2012)	Analysis of Kaohsiung MRT system data revealed that facilitating conditions significantly influence users' adoption of electronic tickets.
(Shibl, Lawley& Debuse, 2013)	Their study on clinical decision support system (CDSS) adoption demonstrated that facilitating conditions significantly influence healthcare professionals' acceptance and adoption behaviors.
(Yan & Wang, 2016)	Their empirical study on digital red packet adoption revealed that facilitating conditions significantly influenced users' engagement behaviors.
(Fang , Zhang , & Li , 2018)	Their investigation of teachers' behavioral intentions toward online education platforms demonstrated that facilitating conditions positively influenced platform adoption.
(Shi, 2019)	Extending the UTAUT framework, this study integrated technology fit, individual innovativeness, and trust to examine academic social network adoption. The proposed model revealed that facilitating conditions significantly enhance users' platform engagement.

This study conceptualizes facilitating conditions as the technical infrastructure and support mechanisms enabling teachers to utilize digital education platforms. These conditions encompass: Technical foundations (e.g., network coverage, signal stability); Hardware accessibility (e.g., smartphones, tablets); Individual competencies (e.g., technical knowledge, operational skills). The proliferation of digital education platforms—accelerated by mobile

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internet penetration—has enabled ubiquitous access to pedagogical resources, eliminating spatial-temporal constraints. Enhanced platform security, stability, and user experience further reinforce adoption.

Key Determinants of Adoption:

Compatibility with users' existing systems and lifestyles positively predicts platform engagement.

Barriers (e.g., high costs, value misalignment, or inadequate hardware) significantly inhibit usage.

Hypothesis: Facilitating conditions positively influence teachers' behavior of digital education platforms.



2.7.10 Relationship Between Perceived Trust and Behavior to use

Trust constitutes a complex, multidisciplinary construct with varying conceptualizations across scholarly domains. Two predominant theoretical perspectives emerge from the literature:

Competence-Based Trust: The confidence in another party's reliability, expertise, and goodwill (Ganesan, 1994); (Doney & Cannon, 1997); (Gefen, Karahanna & Straub, 2003).

Relational Trust: The voluntary dependence on others despite uncertainty and lack of control (Zucker, 1986).

Despite conceptual divergence, empirical research consistently demonstrates trust's significant predictive power regarding behavioral adoption across contexts (see the following Table).

Table.2.23 The existing study on the influence of trust on using behavior

Sources	Content of the Applied Research
(Zhou , Lu & Zhang, 2009)	Their empirical findings demonstrate that trust significantly influences mobile e-commerce adoption behavior.
(Lin, 2010)	His investigation of trust dynamics in mobile commerce revealed that trust significantly and directly influences consumers' mobile banking adoption.
(Wang Xianwen ,2017)	His study revealed that teachers' technology trust significantly predicts both sustained usage and frequency of technology adoption.

The literature establishes trust as a critical determinant of consumer behavior in digital environments. For internet-based digital education platforms, cybersecurity risks and operational uncertainties inherently raise teacher concerns. In this context, institutional trust serves two key functions:

Competence Assurance: Confidence in the platform's technical capabilities and service quality

Integrity Security: Belief in the provider's ethical business practices

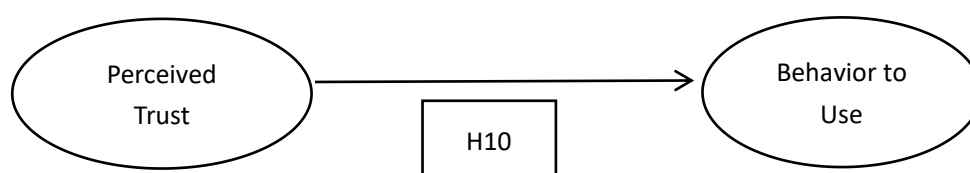
When present, such trust:

Reduces perceived risk of platform failure

Enhances perceived value of digital resources

Strengthens adoption confidence

Conversely, trust deficits create significant adoption barriers. Therefore, we hypothesize: Perceived trust has positively effect on behavior to use digital education platforms.



2.7.11 Relationship Between Intention to Use and Behavior to use

Behavioral intention, defined as an individual's willingness to adopt specific technologies, constitutes a well-established predictor of actual usage behavior. This intention-behavior linkage has been empirically validated across numerous technology acceptance studies, as evidenced by the representative findings summarized in the following table.

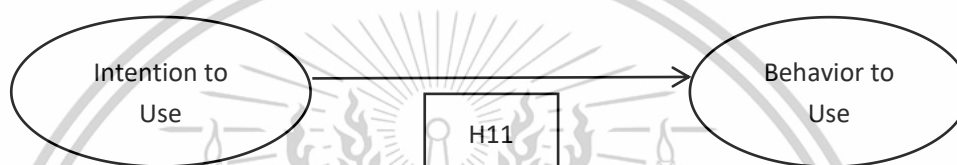
Table.2.24 The existing study on the influence of using intention on using behavior

Sources	Content of the Applied Research
(Venkatesh, Morris, Davis& Davis,2003)	His research systematically validated the intention-behavior relationship across multiple theoretical frameworks, including: Theory of Reasoned Action (TRA);Theory of Planned Behavior (TPB);Technology Acceptance Model (TAM); Unified Theory of Acceptance and Use of Technology (UTAUT).These models consistently operationalize behavioral intention (the subjective probability of adopting technology) as a direct antecedent of usage behavior. Empirical evidence confirms behavioral intention's strong predictive validity for actual adoption.
(Wu, Yu, & Weng 2012)	Analysis of Kaohsiung MRT system data revealed that behavioral intention significantly predicts electronic ticket adoption among users.
(Zhang Yi, Liu Xiaoli, Fan Fulan& Zhou Ping Yinghong, 2015)	Their study demonstrated that behavioral intention significantly predicts online community engagement.
(Yan & Wang, 2016)	He studies the use behavior of electronic red envelope users, and the empirical research shows that the use behavior intention of electronic red envelope users positively affects the use behavior, and the stronger the behavior intention of electronic red envelope users, the more likely it will be transformed into the actual use behavior.
(Wu & Zhang, 2018)	His study proposed that business faculty's behavioral intention toward e-learning systems significantly predicts actual system usage.
(He & Huang, 2020)	Guided by the Technology Acceptance Model (TAM) and Intergenerational Support Theory, their study examined smartphone adoption among elderly users, revealing that usage

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intention directly predicts actual usage behavior.

This study establishes teachers' behavioral intention as the primary determinant of digital education platform adoption. The strength of usage willingness directly predicts actual utilization frequency. Based on technology acceptance principles, we propose: Intention positively influences teachers' behavior to use digital education platform.



2.7.12 Mediating Effect of Intention to Use on Perceived trust and behavior to use

In the context of rapid technological advancement and widespread Internet penetration, trust has assumed an increasingly prominent and critical role in transactional activities, often serving as a decisive factor in the ultimate success of transactions. Extant literature extensively demonstrates that trust effectively enhances and drives consumers' behavioral intentions (Koufaris & Hampton-Sosa, 2004); (Pavlou, 2003); (Yin, 2020).

Since Fishbein and Ajzen introduced the Theory of Reasoned Action (TRA), behavioral intention has garnered substantial scholarly attention and recognition as a construct that captures the intensity of an individual's subjective willingness to engage in a specific behavior. With the progressive evolution of technology acceptance theories—such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT)—behavioral intention has been established as an indispensable factor and mediating variable. It serves as a direct determinant of actual behavior and functions as a critical linkage between external influencing factors and usage behavior.

Empirical research, particularly in the domain of technology acceptance within

Internet-based environments, consistently identifies trust as a pivotal variable that indirectly

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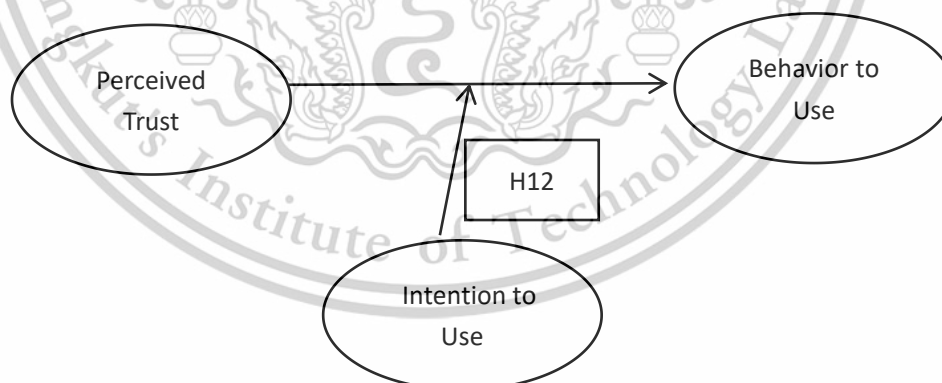
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shapes usage behavior by influencing behavioral intention. For instance, Dehua (2009), in an investigation of rural residents' adoption of mobile information services, empirically verified that trust in such services significantly strengthens behavioral intention, which in turn positively affects the actual utilization of mobile information services.

This study, grounded in established technology acceptance theory, demonstrates that teachers' trust positively influences their willingness to adopt digital education platforms, ultimately facilitating their actual usage behavior. Specifically, behavioral intention to use digital education platform resources serves as a mediating mechanism between trust and platform utilization.

This mediating effect is particularly salient in the context of digital education platforms, where inherent risks and uncertainties—such as concerns over privacy, security, and operational reliability—heighten the importance of trust. Teachers' trust mitigates these apprehensions, thereby strengthening their behavioral intention to engage with the platform, which in turn drives actual usage.

Based on this theoretical framework, the following hypothesis is proposed: Behavioral intention to use (UI) mediates the effect of perceived trust on digital education platform usage behavior.



2.7.13 Moderating Effect of Teacher Gender on Relationship Between PE, EE, SE, FC, HM and Intention to Use

Empirical evidence from (Padilla-Meléndez, del Aguila-Obra & Garrido-Moreno, 2013) confirms that gender significantly moderates key technology acceptance dimensions, including performance expectancy, social influence, facilitating conditions, and hedonic motivation. In light of these findings, this study operationalizes gender as both a moderating

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variable and latent construct within the research model.

2.7.14 Moderating Effect of Teaching experience on Relationship between PE, EE, SE, FC, HM and Intention to Use

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) identifies three fundamental background variables: age, gender, and experience. Within educational contexts, teaching age serves as a composite indicator that inherently encompasses both gender-related patterns and accumulated professional experience. Empirical research has established significant variations in performance expectancy among educators at different career stages (Wang, Tigelaar & Admiraal, 2019). Accordingly, this study incorporates teaching age as both a moderating variable and latent variable in the research framework.

2.7.15 Moderating Effect of Culture on Relationship between PE, EE, SE, FC, HM and Intention to Use

Existing scholarship has established significant cultural influences on technology adoption intentions. Multiple empirical studies consistently demonstrate culture's moderating role in shaping usage intentions (Almatarihad & Balaid, 2013; Juinn & Tan, 2013; Khechine & Pascot, 2013; Lakhali, Khechine, and Pascot, 2013; (Nordin, Norman, & Embi, 2015); (Sung, Jeong, Jeong & Shin, 2015); (Thomas, Singh & Gaffar, 2013). Building upon this robust evidence base, the present study proposes the following hypothesis: Culture moderates the relationships between performance expectancy (PE), effort expectancy (EE), social influence (SE), facilitating conditions (FC), hedonic motivation (HM) and intention to use digital education platforms.

2.8 Conceptual Framework

From the analysis of the literature review, and the consultation of the concepts, theories, and models regarding the relationship between variables, the following conceptual framework was developed.

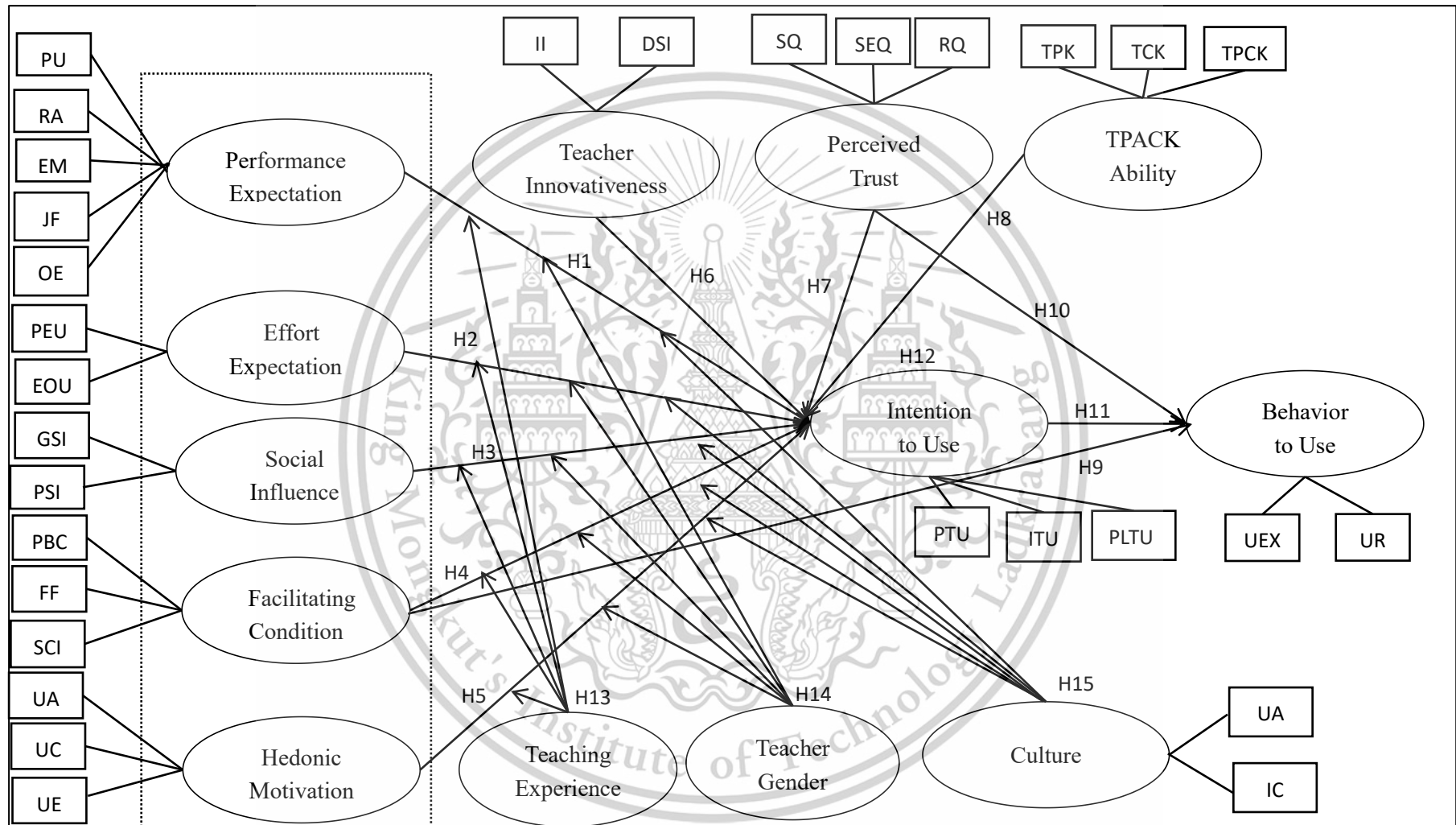


Figure.2.18 Conceptual Framework of the study

The proposed conceptual framework establishes the following variable relationships:(1)Dependent variable: Actual usage behavior of digital education platform resources.(2)Mediating variable: Behavioral intention to use platform resources Independent variables:Performance expectancy (PE);Effort expectancy (EE);Social influence (SI);Facilitating conditions (FC);Hedonic motivation (HM);Teacher innovativeness (TI);Perceived trust (PT);Technological pedagogical content knowledge (TPACK).Based on this framework, we formally propose the hypotheses presented in the following table.

Table.2.25 Relationship Between the Variables

variable	Serial Number	Research Hypotheses
Performance Expectation (PE)	H1	PE has a positive effect on the intention of teachers to use digital education platforms.
Effort Expectation (EE)	H2	EE has a positive effect on the intention of teachers to use digital education platforms.
Social Influence (SI)	H3	SI has a positive effect on the intention of teachers to use digital education platforms.
Facilitating Condition (FC)	H4	FC has a positive effect on the intention of teachers to use digital education platforms.
	H9	FC has a positive effect on the behavior of teachers to use digital education platforms.
Hedonic Motivation (HM)	H5	HM has a positive effect on the intention of teachers to use digital education platforms.
Teacher Innovativeness (TI)	H6	TI has a positive effect on the intention of teachers to use digital education platforms.
Perceived Trust (PT)	H7	PT has a positive effect on the intention of teachers to use digital education platforms.
	H10	PT has a positive effect on the behavior of teachers to use digital education platforms.
TPACK Ability (TPACK)	H8	TPACK has a positive effect on the intention of teachers to use digital education platforms.
Intention To Use (UI)	H11	UI has a positive effect on the behavior of teachers to use digital education platforms.
	H12	UI mediates the effect of perceived trust on behavior to use digital education platforms.
Background variables	H13	There are differences in PE、EE、SI、FC、HM among teachers of different genders.

variable	Serial Number	Research Hypotheses
	H14	There are differences in PE、EE、SE、FC、HM among teachers of different teaching experience.
	H15	There are differences in PE、EE、SE、FC、HM among teachers of culture.



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CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This study examines the factors influencing rural Chinese teachers' intention and behavior regarding digital education platform usage, employing an extended UTAUT2 framework. The research model, titled "Behavioral Model of Digital Education Platform Adoption among Chinese Rural Teachers," specifically investigates the determinants affecting platform utilization in rural educational contexts.

The theoretical framework adapts the UTAUT2 model by integrating three additional constructs:

Teacher innovativeness

Perceived trust

TPACK (Technological Pedagogical Content Knowledge) capability

Methodologically, this quantitative study employed:

Primary data collection through structured questionnaires (N=600)

Structural Equation Modeling (SEM) for data analysis

Comprehensive literature review utilizing peer-reviewed journals, scholarly articles, academic monographs, and relevant dissertations to establish theoretical foundations for all study variables and hypotheses.

3.1 Quantitative Research

3.1.1 Population and samples

3.1.2 Sampling and sample size

3.1.3 Variables in the study

3.1.4 Research instruments and the scale

3.1.5 Quality of the instruments

3.1.6 Data collection methods

3.1.7 Data analysis

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This study adopts a quantitative research approach to examine the factors influencing behavioral intention toward digital education platforms in China. The methodology integrates primary data analysis (via SEM) and systematic literature review to ensure theoretical and empirical rigor. The following sections outline the research procedures aligned with the objectives stated in Chapter One.

Step 1: Literature Review and Theoretical Foundation

A systematic review of peer-reviewed journals, seminal theories (e.g., TAM, UTAUT), and empirical studies was conducted to:

Identify key variables: The framework incorporates 9 latent constructs, 3 moderators, and 1 dependent variable, measured by 30 observed indicators.

Define research gaps: Discrepancies in prior studies (e.g., limited focus on China's digital education context) justified this study's scope.

Develop hypotheses and framework: Synthesizing existing evidence, a conceptual model was constructed to guide SEM analysis.

Step 2: Quantitative Data Collection and Analysis

Survey Design: A structured questionnaire (5-point Likert scale) was distributed to a stratified sample of digital platform users in China.

Data Screening: Responses were cleaned (removing outliers/incomplete entries) and tested for reliability (Cronbach's $\alpha > 0.7$) and validity (EFA/CFA).

SEM Analysis: Using AMOS 26.0, path analysis assessed relationships between constructs, with model fit evaluated via CFI, RMSEA, and χ^2/df .

Step 3: Secondary Data Integration

To triangulate findings, secondary data from academic databases (e.g., Scopus, Web of Science), government reports, and credible online sources were analyzed. This process:

Reinforced variable selection and hypothesis formulation.

Provided contextual insights for interpreting SEM results.

Ethical Considerations

Participant anonymity and informed consent were ensured.

Data were stored securely, adhering to GDPR/equivalent guidelines.

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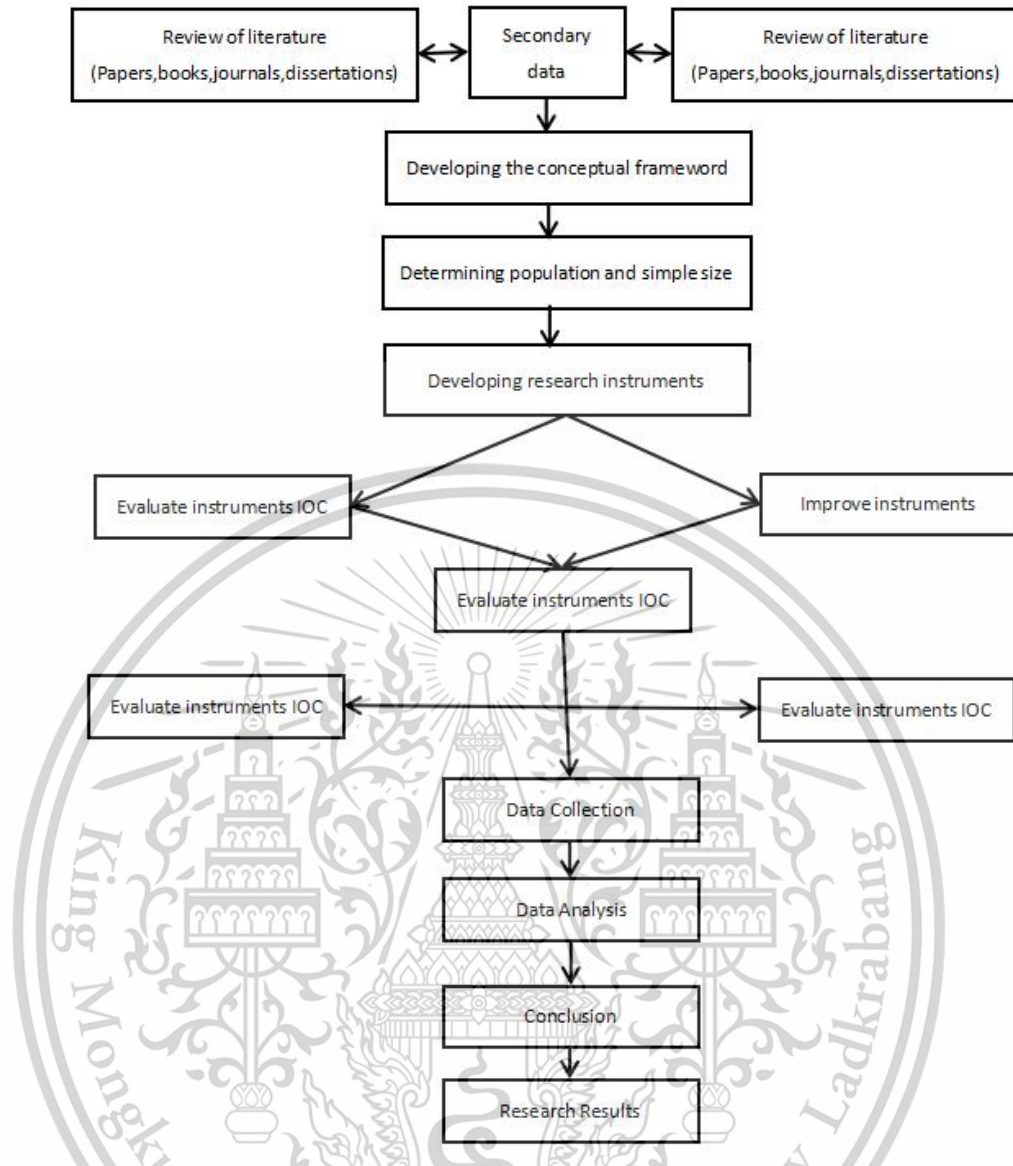


Figure 3.1 Process of Research Methodology

3.2 Quantitative

3.2.1 Population and Sample

Population

This study investigates the factors influencing the adoption of digital education platforms in China, employing a modified UTAUT2 (Unified Theory of Acceptance and Use of Technology 2) model. The target population comprises: Rural educators teaching social sciences and information technology subjects; rural teachers with documented experience

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using digital education platforms; participants distributed across China's major rural regions.

According to the Hootsuite Digital Report (2023), China has a total population of 1.41 billion, including 3.3 million rural teachers and 1 billion internet users. Given the vast population size, a representative sampling strategy was employed to ensure data validity and generalizability. The sample was carefully selected to reflect the diversity of the target groups, facilitating meaningful analysis of adoption behaviors.

3.2.2 Sample and Sampling Design and Technique

This study examines the factors influencing the adoption of digital education platform resources among rural teachers in China. The research focuses specifically on educators with demonstrated experience using digital education platforms.

Sampling Design

A probability sampling approach was employed to ensure each member of the target population had an equal opportunity for selection, thereby minimizing selection bias (Burger & Silima, 2006). This methodological choice enhances the representativeness and generalizability of findings.

Sampling Technique

The study utilized stratified random sampling to obtain a representative sample (Burger & Silima, 2006). This technique was implemented through the following procedure:

Sample Size Determination

Following (Hair, Ringle, & Sarstedt, 2011)'s recommendations, the minimum required sample size was calculated based on:

Absolute minimum: 5 respondents per analyzed variable

Optimal ratio: 20 respondents per variable

With 30 observed variables in the study framework, the target sample size was established at 600 respondents (20×30 variables)

The final cleaned data set exceeded this minimum threshold, as detailed in the following table (sample size distribution by region).

Implementation Process

The sampling procedure specifically targeted: Rural educators, teaching social sciences

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and information technology subjects;rural teachers with documented experience using digital education platforms;participants distributed across China's major rural regions.

This stratified approach ensured adequate representation across key demographic and professional variables while maintaining the statistical power required for structural equation modeling analysis.

Table 3.1 Sample Size and Regions

Region	Number of Respondents	Actual Sample Size Used
China	600	612

Step 2: Set the regional sample size

According to (*The China Statistical Yearbook 2024*, n.d.), China's rural teachers are geographically distributed across six regions: East, Central-South, North, Northeast, Northwest, and Southwest. The national rural teacher population totals 1,576,771, with regional distributions as follows:

Sampling Methodology

The study employed a proportionate stratified random sampling technique to ensure regional representation. Sample allocation was determined by:

Dividing the total sample size equally across regions

Further distributing each regional quota to rural schools based on their proportion of rural teachers

Randomly selecting schools within each region

This approach maintained population proportionality while ensuring random selection at the institutional level. The complete breakdown of selected schools and their respective sample sizes is presented in the following table.

Table 3.2 China Regions and sample size

Areas	Provinces	Institutes	Sample Size
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Areas	Provinces	Institutes	Sample Size
East	Sangdong;Jiangshu;Anhui;Zhejiang; Fujian;Shanghai;Jiangxi	Caowang School, District, Shanghai	Primary Jiading 120
Centralsou th	Hubei;Hunan;Henan;Guangdong;Guan gxi;Hainan	Hunan Liuyang City Town Dayao High School	Province Dayao Junior 204
North	Beijing;Tianjing;Hebei;Shangxi;Neime nggu	New Rural Primary Miyun Beijing Municipality	District School in County, 72
Northeast	Liaoning;Jining; Heilongjiang	Chengbo Township Primary Xifeng Tieling City, Province	Manchu Central School, County, Liaoning 24
Westnorth nshu	Ningxia;Xingjiang;Qinghai;Shangxi;Ga nshu	Qinghai County Primary school	Huzhu Najia Village 72
Westsouth	Sichuan;Yunan;Guizhou;Xizhang;Chon gqing	Sunshine Primary Niujie Midu County, Province	Star Boai School, Township, Yunnan 108

Source:(*The China Statistical Yearbook 2024*, n.d.)

Primary data were collected through a structured questionnaire designed to measure the
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study's theoretical constructs. The instrument was developed based on established scales from prior literature and pretested for validity and reliability.

Analytical Approach

The research employed a two-stage analytical procedure using IBM AMOS software:

Preliminary Analyses

Descriptive statistics to examine variable distributions

Correlation analysis to assess bivariate relationships

Primary Analysis: Structural Equation Modeling (SEM)

As the core analytical technique, SEM enabled:

Evaluation of relationships between latent constructs

Assessment of measurement models linking latent and observed variables

Examination of direct and indirect effects on behavioral intention to adopt digital education platforms

This comprehensive approach allowed for simultaneous testing of the theoretical framework's measurement and structural components, providing robust insights into technology adoption determinants.

3.2.3 Variables in the Research

After conducting, evaluating, and reviewing the relevant concepts, literature review, theories, the study developed the latent and observational variables presented below.

The exogenous latent variables:

1. Performance expectation: consisted of 5 observed variables

Perceived Usefulness

External Motivation

Relative Advantage

Job-Fit

Outcome Expectations

2. Effort expectation: consisted of 2 observed variables

Perceived Ease of Use

Ease of Use

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3.Social influence:consisted of 2 observed variables

General Social Influence

Peer Social Influence

4.Facilitating conditions:consisted of 3 observed variables

Perceived Behavioral Control

facilitating Factors

System Compatibility With Individuals

5.Hedonic motivation:consisted of 3 observed variables

User attention

User curiosity

User Enjoyment

6.Teacher innovativeness:consisted of 2 observed variables

Innate Innovativeness

Domain Specific Innovativeness

7.Perceived trust:consisted of 3 observed variables

System quality

Relationship quality

Service quality

8.TPACK ability:consisted of 3 observed variables

Technological Pedagogical Knowledge

Technological Content Knowledge

Technological Pedagogical Content Knowledge

9.Intention to use:consisted of 3 observed variables

Intention

Prediction

Planning

The Endogenous Latent variables:**behavior to use**

Using experience

Using reaction

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The moderating latent variable:**teaching experience****teacher gender****Culture:**consisted of 2 observed variables

Uncertainty avoidance

Individualism/collectivism

The data was collected from the sample in China using the structured questionnaire.

3.3 Research Instruments Development**Theoretical Foundation**

The research instrument was developed through a comprehensive review of established theories and empirical studies in comparable educational technology contexts. This rigorous process ensured alignment between the measurement items and the study's theoretical framework.

Conceptual Framework Integration

The questionnaire items were designed to operationalize the relationships between:

Endogenous and exogenous variables

Mediating factors

Observed indicators

This structure enabled systematic examination of the hypothesized relationships within the research model.

Expert Validation Process

The instrument underwent rigorous evaluation by three domain experts who assessed:

Content validity

Item-Objective Congruence (IOC)

Following (Turner & and Carlson, 2003) standards, items with IOC scores below 0.5 were revised or eliminated to ensure all questions effectively addressed the research objectives.

Bilingual Implementation

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The final questionnaire was administered in both English and Chinese versions. The Chinese translation was conducted by the researcher (a native speaker with extensive research experience) to maintain conceptual equivalence and cultural appropriateness for the Chinese respondent population.

Reliability Assessment

Internal consistency was evaluated using Cronbach's alpha (α) coefficient, with particular attention to Likert-scale items. This analysis verified the measurement scales' reliability before proceeding with structural equation modeling.

3.3.1 The Structure of the Questionnaire and Instruments

The research was conducted based on a set of questionnaires. The questionnaire was developed on the basis of the reviewed previous literature, concepts, theories, and models, and in reference to the research questions. The questions were set to evaluate all the variables of the study, including performance expectancy, effort expectancy, social influence, facilitating conditions, teacher innovativeness, perceived trust,TPACK ability, culture, intention to use ,and behavioral to use.

The questionnaire was divided into seven sections:

Part 1: Demographic Data - this section was collected the personal data of the respondents such as age, gender, educational level, occupation, salary, and current residence location. This was aimed to capture the demographic characteristics of the respondents.

Part 2:Latent Variable Questions - this section contained questions, which evaluated the latent variables and their relationships. This section was developed in reference to the previous literature.

Part3:3.1Performance Expectation:the questions related to the performance expectation was developed with reference to various researchers such as (Venkatesh, Morris, Davis& Davis,2003), (Venkatesh,Thong& Xu,2012), (Keeton, Perry-Jenkins & Sayer, 2008), (Wang, Tigelaar& Admiraal, 2019), (Sheikh, Islam, Rana, Hameed& Saeed, 2017), (Tseng, LinWang& Liu, 2022), (Wang, Meister& Wang, 2008)and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the effort expectation questionnaire,see the

details in the table below.

Table 3.3 Questions on Performance Expectation

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Performance Expectation (Venkatesh, Morris, Davis& Davis,2003) (Batra, 2020)	Perceived Usefulness (PU)	Using mobile internet helps me accomplish things more quickly.	Using platform resource enables me to accomplish my learning activities more quickly.	(Venkatesh, Thong & Xu, 2012)
		Using mobile Internet increases my productivity.	Using platform resource improves my learning performance (i.e., develop new skills, techniques, and gain experience).	(Venkatesh, Thong & Xu, 2012)
		Using MOOCs increases productivity in my learning activities (i.e., able to learn and understand a large amount of information)	Using platform increases productivity in my learning activities (i.e., able to learn and understand a large amount of information)	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Using MOOCs enhances my effectiveness in my learning activities (i.e., gain comprehensive knowledge and greater understanding about course being studied for improving grades and academic performance)	Using platform enhances my effectiveness in my learning activities (i.e., gain comprehensive knowledge and greater understanding about course being studied for improving grades and academic performance)	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Using MOOCs would make it	Using platform would make it easier to compete	(Khalid, Chaveesuk &

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		easier to compete courses and modules faster.	to my courses and modules faster.	Chaiyasoonthorn, 2021)
		I find mobile Internet <u>useful in my daily life.</u>	I would find platform <u>useful in my learning activities.</u>	(Venkatesh, Thong & Xu, 2012)
Relative Advantage (RA)	Using the system enables me to <u>accomplish tasks more quickly.</u>	Using the platform resource enables me to <u>learn more quickly</u> as compared to traditional classroom.	Using platform resource enables me to <u>learn more quickly</u> as compared to traditional classroom.	(Wang, Meister & Wang, 2008)
	Using the system <u>improves the quality of the work I do.</u>	Using platform <u>improves the quality of my learning activities</u> (i.e., to achieve better grades and improve academic performance).	Using platform <u>improves the quality of my learning activities</u> (i.e., to achieve better grades and improve academic performance).	(Wang, Meister & Wang, 2008)
	I can <u>save time</u> when I use social media websites in the online purchasing process.	Compared with the traditional learning, using platform can give me the <u>freedom to learn.</u>	Compared with the traditional learning, using platform can give me the <u>freedom to learn.</u>	(Sheikh, Islam, Rana, Hameed & Saeed, 2017)
	I am able to <u>acquire information using MOOCs</u> for my learning activities.	I am able to <u>acquire information using platform</u> for my learning activities.	I am able to <u>acquire information using platform</u> for my learning activities.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	I am able to <u>obtain the latest knowledge in education-related issues using MOOCs.</u>	I am able to <u>obtain the latest knowledge in education-related issues using platform.</u>	I am able to <u>obtain the latest knowledge in education-related issues using platform.</u>	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
Extrinsic Motivation	I can <u>save money</u> by examining the	Using platform resource can <u>increase wages.</u>	Using platform resource can <u>increase wages.</u>	(Sheikh, Islam, Rana, Hameed &

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
	(EM)	prices of products on different social media websites.		Saeed, 2017)
		Using the system <u>enhances my effectiveness on the job.</u>	Using the platform resources can <u>help to work.</u>	(Wang, Meister& Wang, 2008)
		Using the system <u>increases my productivity.</u>	Using platform resources can <u>increase opportunities for promotion.</u>	(Wang, Meister& Wang, 2008)
		I am able to <u>learn through interactive discussions from using MOOCs.</u>	I am able to <u>learn through interactive discussions from using platform.</u>	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		I am able to <u>generate an environment of trust using MOOCs.</u>	I am able to <u>generate an environment of trust using platform.</u>	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	Job-fit (JF)	Using the system makes it easier to do my job.	The platform resources are <u>close to my work field.</u>	(Wang, Meister& Wang, 2008)
		Using MOOCs <u>increases my teaching productivity</u>	Using platform resources can <u>increase work output.</u>	(Tseng, LinWang& Liu, 2022)
		Using MOOCs can <u>promote my teaching goals.</u>	Digital education platform resources can be used in <u>conjunction with textbooks</u> and other resources.	(Tseng, LinWang& Liu, 2022)
	Outcome Expectations (OE)	Using mobile Internet <u>increases my chances of achieving things that are</u>	If I use platform I will <u>increase the chances of getting higher marks on test and exams for the same amount of effort.</u>	(Venkatesh, Thong& Xu, 2012)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		important to me.(dropped)		
		Using MOOCs is cost-effective.	If I use platform, my classmates will perceive me as competent.	(Tseng, LinWang& Liu, 2022)
		MOOCs provide good value.	If I use platform, I will increase my chances of advancing to the next level.	(Tseng, LinWang& Liu, 2022)
		I am able to assimilate research and education related issues using MOOCs.	I am able to assimilate research and education related issues using platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		I am able to share important knowledge using MOOCs.	I am able to share important knowledge using platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)

Part3:3.2Efforts Expectation:This paper mainly refers to the research results of (Venkatesh, Morris, Davis& Davis,2003), (Venkatesh,Thong& Xu,2012), (Keeton, Perry-Jenkins & Sayer, 2008), (Sheikh, Islam, Rana, Hameed& Saeed, 2017)and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the effort expectation questionnaire,See the details in the table below.

Table3.4 Questions on Efforts Expectation

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Efforts Expectation (Venkatesh, Morris, Davis& Davis,2003)	Perceived Ease of Use (PEOU)	Learning how to use mobile Internet <u>is easy for me.</u>	Learning to operate platform would <u>be easy for me.</u>	(Venkatesh,Thong& Xu,2012)
		My interaction with mobile	I find platform to be <u>flexible to interaction</u>	(Venkatesh,Thong&

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		Internet is <u>clear</u> <u>with</u> <u>and</u> <u>understandable</u> .		Xu,2012)
		It is easy for me to <u>become</u> <u>skillful</u> at using mobile Internet.	It is easy for me to <u>become skillful</u> at using platform.	(Venkatesh,Thong& Xu,2012)
		I feel confident in my ability to learn using MOOCs.	I feel confident in my ability to learn using platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
Ease of Use (EOU)	Overall, I find the electronic mail system easy to use.	I believe I require <u>little</u> <u>effort</u> to understand how platform works.		(Davis, 1989)
	Overall, I find the electronic mail system <u>useful</u> in my <u>job</u> .	I <u>often use</u> the platform.		(Davis, 1989)
	I find mobile Internet <u>easy</u> to use.	Overall, I believe that the platform <u>is easy</u> to use.		(Venkatesh,Thong & Xu,2012)

Part3:3.3Social Influence:This paper mainly refers to the research results of (Venkatesh, Morris, Davis& Davis,2003)、(Venkatesh,Thong& Xu,2012)、(Al-Gahtani, Hubona & Wang, 2007)、(Keeton, Perry-Jenkins & Sayer, 2008)、(Sheikh, Islam, Rana, Hameed& Saeed, 2017) and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the social influence questionnaire,See the details in the table below.

Table3.5 Questions on Social Influence

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Social Influence (Venkatesh, Morris, Davis& Davis,2003)	General Social Influence	People who influence my behavior that I <u>should use</u> mobile Internet.	People who influence my behavior think that I <u>should use</u> platform.	(Venkatesh,Thong& Xu,2012)
		People who are important to me think that I <u>should use</u> mobile.	People who are important to me think I <u>should use</u> platform .	(Venkatesh,Thong& Xu,2012)
		People whose opinions that I value <u>prefer</u> that I use mobile internet.	My school <u>supports me to use</u> the platform.	(Venkatesh,Thong& Xu,2012)
		Peer Social Influence	Moodle <u>assists learning</u> motivation.	Learner's who use platform <u>enjoy more prestige than</u> those who do not.	(Islam, 2016)
		Moodle <u>assists learning</u> efficiency.	Learner's who use platform resources <u>have a high profile</u> .	(Islam, 2016)
		People whose opinions that I value, <u>prefer</u> that I <u>should use</u> social media websites for online purchases.	My peers , leaders and teacher think that I <u>should use</u> platform resources.	(Sheikh, Islam, Rana, Hameed& Saeed, 2017)

Part3:3.4:Facilitating Conditions:This paper mainly refers to the research results of (Venkatesh, Morris, Davis& Davis,2003), (Venkatesh,Thong& Xu,2012), (Keeton, Perry-Jenkins & Sayer, 2008), (Sheikh, Islam, Rana, Hameed& Saeed, 2017),(Schmid, Brianza & Petko, 2020);(Islam, 2016)and other scholars, combined with the actual situation

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this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the facilitating conditions questionnaire, See the details in the table below.

Table 3.6 Questions on Facilitating Conditions

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Facilitating Conditions (Venkatesh, Morris, Davis & Davis, 2003)	Perceived Behavioral Control	I have necessary to use the MOOCs.	I have necessary to use the platform resources.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		I have the necessary resources to use social media websites for online purchases.	I have the necessary knowledge to use platform.	(Venkatesh, Thong & Xu, 2012)
		I feel comfortable using social media websites for online purchases.	I have mastered the knowledge and skills to using platform.	(Venkatesh, Thong & Xu, 2012)
		I have the knowledge necessary to use social media websites for online purchases.	I have the knowledge necessary to use the platform.	(Venkatesh, Thong & Xu, 2012)
Facilitating Conditions		I will ask my friends on forums and communities to provide me with their suggestions before I go shopping.	Guidance is available to me in the selection of platform.	(Sheikh, Islam, Rana, Hameed & Saeed, 2017)
		When	I It is necessary to guide	(Sheikh,

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		encountered a problem, some people on my favourite social media website would give me information to help me overcome the problem.	<u>me</u> specifically on the use of digital platform.	Islam, Rana, Hameed & Saeed, 2017)
		<u>Specialized instruction concerning the MOOCs</u> was available to me.	<u>Specialized instruction concerning the platform</u> was available to me.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		I can get the support from a specific person/group when I face difficulties with MOOCs.	I can get the support from a specific person/group when I face difficulties with platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Moodle is compatible with most aspects of my study	Using platform fits my learning.	(Islam, 2016)
	system compatibility with individuals	MOOCs are compatible with other education technologies I use.	The platform content of the platform is compatible with my research field.	(Islam, 2016)
		I have used Moodle frequently during my study.	Even if I do not understand the teaching process of modern technology, but it does not affect my use.	(Islam, 2016)
		I have used Moodle heavily during my study.	When I want to use technology to teach, I can immediately think of the content and technology of a certain digital education	(Islam, 2016)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
			platform resources.	

Part3:3.5:Hedonic Motivation:This paper mainly refers to the research results of (Venkatesh, Morris, Davis& Davis,2003), (Venkatesh,Thong& Xu,2012),(Keeton, Perry-Jenkins & Sayer, 2008), (Sheikh, Islam, Rana, Hameed& Saeed, 2017),(Schmid, Brianza & Petko, 2020),(Wang, 2022) and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the hedonic motivation questionnaire,see the details in the table below.

Table 3.7 Questions on Hedonic Motivation

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Hedonic Motivation (Venkatesh, Morris, Davis& Davis,2003)	User Attention	Online learning platforms can strengthen classroom interaction.	Using platform resources to conduct teaching makes students more focused on class.	(Wang, 2022)
		Online learning platforms can guide me to explore knowledge.	Using platform resources to develop teaching enables students to better complete their learning tasks.	(Wang, 2022)
		Using MOOCs to give me learning freedom.	Using platform to give students learning freedom.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Using MOOCs to make me communicate ideas regularly using MOOCs.	Using platform to make students communicate ideas regularly using platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	User Curiosity	The online learning platform can	Using platform resources to carry out teaching has made me more curious to	(Wang, 2022)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		stimulate my curiosity about learning.	explore the knowledge of various disciplines.	
		Online learning platforms can strengthen classroom interaction.	Using platform resources to conduct teaching enables students to answer questions more actively.	(Wang, 2022)
		Using MOOCs make students easier to share knowledge.	Using platform make students easier to share knowledge.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Online learning platforms can strengthen classroom atmosphere.	Using platform resources to develop teaching can activate the classroom atmosphere.	(Wang, 2022)
	User Enjoyment	Using mobile Internet is fun.	It is interesting to use platform resources for teaching.	(Venkatesh, Thong & Xu, 2012)
		Using mobile Internet is enjoyable.	Using platform to develop teaching can stimulate students' interest in learning.	(Venkatesh, Thong & Xu, 2012)
		Using mobile Internet is very entertaining.	I am very satisfied with the use of platform for teaching.	(Venkatesh, Thong & Xu, 2012)

Part3:3.12:Teacher Innovativeness:This paper mainly refers to the research results of (Yang, n.d.), (R. L. Roehrich, 1984),(R. Xie, 2022) 和 (zhang, 2017)and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the Teacher innovativeness questionnaire,See the details in the table below.

Table 3.8 Questions on Teacher Innovativeness

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Teacher	Innate	I would love to	I am more interested in	(H. Yang,

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Innovativeness (Goldsmith & Hofacker, 1991)	Innovativeness	try to do things in new ways	using the new technologies and new products of the platform.	(H. Yang, n.d.)
		I am more willing to accept new ideas and things	I like to use platform for new technologies and new products.	(H. Yang, n.d.)
		I gather relevant information before deciding to accept a new idea or thing	I'm excited to use new technologies and products from platforms.	(H. Yang, n.d.)
		I have good study habits and time management using MOOCs.	I have good study habits and time management using platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		I have a great sense of personal responsibility for using MOOCs.	I have a great sense of personal responsibility for using platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
Domain Specific Innovative ness (DSI)	Domain Specific Innovative ness (DSI)	I show initiative and judgment in carrying out my learning activities when using MOOCs.	I show initiative and judgment in carrying out my learning activities when using platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Anyway, I really like to accept new things	Even if the school doesn't organize me to use the platform for new technology, I will learn about it from time to time.	(H. Yang, n.d.)
		I know a lot about the new technologies and the platforms	About platform, I know more about the latest education and teaching technology platform resources than others.	(H. Yang, n.d.)
		Among my peers, I am	When I listen to the latest technical resources in	(H. Yang, n.d.)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		usually <u>the first person</u> to try out new information technology products	education, I will <u>be the first</u> to learn more information.	

Part3:3.13:Perceived Trust:This paper mainly refers to the research results of (Venkatesh, Morris, Davis& Davis,2003),(Sheikh, Islam, Rana, Hameed& Saeed, 2017),(Delone & Mclean, 1992),(G. Xie, 2016)and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the perceived trust questionnaire,See the details in the table below.

Table 3.9 Questions on Perceived Trust

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Perceived Trust (Venkatesh, Morris, Davis& Davis,2003)	System Quality	The science knowledge of the science communication website is <u>updated quickly</u> , and I can get the freshest information and knowledge.	Now the platform start speed, running speed is <u>very fast</u> .	(Xie, 2016)
		The science communication website responds very quickly, and I can use <u>it very smoothly</u> .	The operation of the current platform is <u>very smooth</u> .	(Xie, 2016)
		The scientific knowledge and information	Now the platform registration and login is <u>very convenient</u> .	(Xie, 2016)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		sources of science communication websites <u>are strictly checked</u> and <u>very reliable.</u>		
		Science communication sites have <u>less interference information.</u>	Now the platform downloads smoothly, <u>no flash back, no response error.</u>	(Xie, 2016)
		The reminder function of the science communication website will timely push the information related to the content of my attention, which <u>is very intimate.</u>	In general, the system experience of platform <u>is very good.</u>	(Xie, 2016)
	Relationship Quality	When I encountered a problem, some people on my favourite social media website would give me information to help me overcome the problem.	I can ask teachers' questions and get answers in time on the platform currently used.	(Sheikh, Islam, Rana, Hameed& Saeed, 2017)
		I will <u>ask my friends</u> on forums and communities to provide me with their suggestions	I can exchange my <u>learning experience with my classmates</u> on the platform currently used.	(Sheikh, Islam, Rana, Hameed& Saeed, 2017)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		before I go shopping.		
		On my favourite social media website, <u>some people would offer suggestions</u> when I needed help.	On the platform currently in use, I think I <u>am very familiar with</u> my classmates.	(Sheikh, Islam, Rana, Hameed& Saeed, 2017)
service quality	Mobile Internet is <u>reasonably priced</u> .	I think the platform content and information is <u>reasonably priced</u> .		(Venkatesh,Th ong& Xu,2012)
	Mobile internet is a <u>good value</u> for the money.	Compared with the time and energy I need to invest, I still think the use of platform <u>is very valuable</u> .		(Venkatesh,Th ong& Xu,2012)
	At the current price, <u>mobile internet provides a good value</u> .	Overall, I <u>am very satisfied with and trust</u> the platform.		(Venkatesh,Th ong& Xu,2012)

Part3:3.14:TPACK Ability:This paper mainly refers to the research results of (Archambault & Crippen, 2009),(Schmid, Brianza & Petko, 2020) ,(G. Xie, 2016)and other scholars, combinese context and the problem background situation, designs the TPACK ability questionnaire,See the details in the table below.

Table 3.10 Questions on TPACK Ability

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
TPACK Ability (Archambault	Technolo gical Pedagogi	My ability to use online student assessment to <u>modify instruction</u> .	I was able to use platform student assessments to <u>adjust</u>	(Schmid, Brianza & Petko, 2020)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
& Crippen, 2009)	cal knowledge(TPK)		<u>the teaching.</u>	(Archambault & Crippen, 2009)
		My ability to use technology to <u>create effective representations</u> of content that depart from textbook knowledge.	I was able to use platform to <u>create valid content statements</u> out of the textbook.	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)
		My ability to <u>meet the overall demands</u> of online teaching	My ability can <u>meet the overall needs</u> of contemporary platform resource teaching.	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)
	Technological Content knowledge(TCK)	My ability to use technology to <u>predict students' skill/understanding</u> of a particular topic.	I was able to use platform to <u>predict the student's skills or understanding</u> of a particular topic.	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)
		My ability to <u>create an online environment</u> which allows students to build new knowledge and skills.	I was able to <u>build platform environment</u> that helped students build new knowledge and technology.	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)
		My ability to <u>assist students with troubleshooting</u> technical problems with their personal computers.	I can use platform to <u>improve the degree of students' knowledge</u> (for example, preview the online courseware content in advance, etc.).	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)
	Technological Pedagogical Content knowledge	My ability to use technological representations (i.e. multimedia, visual demonstrations, etc.) to <u>demonstrate specific</u>	I can select platform technologies to use in my classroom that <u>enhance what I teach</u> , how I teach, and what students	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
	e(TPCK)	<u>concepts</u> in my content area).	learn.	
		My ability to comfortably <u>produce lesson plans</u> with an appreciation for the topic.	I can teach lessons that appropriately combine my <u>teaching technologies</u> , and teaching approaches.	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)
		My ability to <u>meet the overall demands</u> of online teaching.	I can provide leadership in <u>helping others</u> to coordinate the use of content, technologies, and teaching approaches at my school and/or district.	(Schmid, Brianza & Petko, 2020) (Archambault & Crippen, 2009)

Part3:3.15:Culture:This paper mainly refers to the research results of (Srite & Karahanna, 2006), (Khalid, Chaveesuk & Chaiyasoonthorn, 2021) combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the Culture questionnaire,See the details in the table below.

Table 3.11 Questions on Culture

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Culture (Srite & Karahanna, 2006)	Individualism/Collectivism	I <u>get better learning results</u> when I study as a MOOC group member than when I study independently on my own.	I <u>get better learning results</u> when I study as platform group member than when I study independently on my own.	(Srite & Karahanna, 2006) (Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Group success is	Group success is more	(Srite &

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		more <u>important individual</u> while success studying MOOCs.	important than <u>individual</u> while success platform.	Karahanna, 2006) (Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Group loyalty should be encouraged even if individual goals suffer while studying MOOCs.	Group loyalty should be encouraged even if individual goals suffer while studying platform.	(Srite & Karahanna, 2006) (Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	Uncertainty Avoidance	Studying MOOCs, rules, and regulations are important because they inform me what is expected of me.	Studying platform, rules, and regulations are important because they inform me what is expected of me.	(Srite & Karahanna, 2006) (Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		Studying the order and structure of MOOCs learning modules is important.	Studying the order and structure of platform learning modules is important.	(Srite & Karahanna, 2006) (Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		It is important to follow MOOCs <u>instructions and procedures</u> closely.	It is important to follow platform <u>instructions and procedures</u> closely.	(Srite & Karahanna, 2006) (Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		<u>Standardized work procedures</u> are helpful when studying with platform.	<u>Standardized work procedures</u> are helpful when studying with platform.	(Srite & Karahanna, 2006) (Khalid,

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		MOOCs.		Chaveesuk & Chaiyasoonthorn, 2021)

Intention To Use: This paper mainly refers to the research results of (Venkatesh, Morris, Davis & Davis, 2003), (Venkatesh, Thong & Xu, 2012), (Keeton, Perry-Jenkins & Sayer, 2008), (Khalid, Chaveesuk & Chaiyasoonthorn, 2021), (Wang, Wu & Wang, 2009). Zhou (2012) and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context and the problem background situation, designs the Intention To Use questionnaire, See the details in the table below.

Table 3.12 Questions on Intention To Use

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Intention To Use (Venkatesh, Morris, Davis & Davis, 2003)	Intention to Use	I <u>intend to use</u> MOOCs Technology in the future.	I <u>intend to use</u> platform resources immediately.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		I <u>will always try to use</u> MOOCs Technology in my daily study.	I <u>look forward to</u> popularizing the use of platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
		I <u>intend to</u> continue using mobile Internet in the future	I <u>intend to use</u> platform learning sessions.	(Venkatesh, Thong & Xu, 2012)
		I <u>will recommend other students to use</u> Mobile-learning Technology	I <u>would recommend others and my colleagues to use</u> platform in their teaching.	(Venkatesh, Thong & Xu, 2012)
	I <u>will always try to use</u> internet in my		If the resources of platform become more diversified in the future, I	(Venkatesh, Thong & Xu, 2012)

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Latent Variables	Observed Variables	Scale	Modified Scale	Sources
		daily life.	<u>plan to use it often in the future.</u>	Xu,2012)
Prediction to Use	I <u>plan to use</u> Mobile-learning Technology in the future	I predict I <u>will use</u> platform in the future.	I predict I <u>will use</u> platform in the future.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	I <u>predict I would use</u> mobile Internet.	I <u>predict I would use</u> platform.	I <u>predict I would use</u> platform.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	I plan to continue to use mobile Internet frequently.	If the resources of platform become more diversified in the future, I <u>predict that I will use</u> them more often in the future.	If the resources of platform become more diversified in the future, I <u>predict that I will use</u> them more often in the future.	(Venkatesh,Thong& Xu,2012)
Planning to use	I <u>plan to use</u> MOOCs immediately.	I <u>plan to use</u> platform immediately.	I <u>plan to use</u> platform immediately.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	I plan to use MOOCs in <u>future learning sessions.</u>	I plan to use platform <u>in future learning sessions.</u>	I plan to use platform <u>in future learning sessions.</u>	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)
	I plan to utilize MOOCs for <u>various purposes</u> such as self-development as well as earning credit hours.	I plan to continue to use the platform for <u>various purposes</u> in the future.	I plan to continue to use the platform for <u>various purposes</u> in the future.	(Khalid, Chaveesuk & Chaiyasoonthorn, 2021)

Part3:3.11:Behavior To Use:This paper mainly refers to the research results of (Chen H. & Tang, 2006), (Venkatesh,Thong& Xu,2012), (Sheikh, Islam, Rana, Hameed& Saeed, 2017),(Sheikh, Islam, Rana, Hameed& Saeed, 2017)and other scholars, combined with the actual situation of this study, adjusts the language expression according to the Chinese context

and the problem background situation, designs the Behavior To Use questionnaire, See the details in the table below.

Table 3.13 Questions on Behavior To Use

Latent Variables	Observed Variables	Scale	Modified Scale	Sources
Behavior To Use (Venkatesh, Morris, Davis & Davis, 2003)	Using Experience	I <u>must use</u> mobile Internet.	I <u>must use</u> platform for learning and teaching.	(Venkatesh, Thong & Xu, 2012)
		I <u>am addicted to</u> using mobile Internet	I <u>have a lot of experience</u> in using platform.	(Venkatesh, Thong & Xu, 2012)
		The use of mobile Internet has <u>become a habit</u> for me.	I use the platform, which <u>has become a habit</u> .	(Venkatesh, Thong & Xu, 2012)
	Using Reaction	I am <u>willing to</u> recommend a product that is worth buying to my friends on the on my favourite social media website.	I <u>am willing to</u> recommend a platform that is worth to my friends on the on my favourite platform.	(Sheikh, Islam, Rana, Hameed & Saeed, 2017)
	I <u>plan to</u> continue to use social media websites frequently for online purchases.	I <u>plan to continue to use</u> the platform frequently.	(Sheikh, Islam, Rana, Hameed & Saeed, 2017)	
	I <u>will continue to use</u> the MOOCs.	I <u>will continue to use</u> the platform.	(Feifei Lv, 2023)	

Part4: Suggestions of Respondent

The questionnaire used for the study was structured as shown in the table below

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Table 3.14 The questionnaire structure

Variable	Total Questions	Question Number	Form/Scale
Part1:Demographic Data	11	-	Nominal
Part2:Latent Variable Questions	96	-	scale
3.3Performance Expectancy		1-15	
3.3.1 Perceived Usefulness	3		
3.3.2External Motivation	3		
3.3.3Relative Advantage	3		
3.3.4Job-Fit	3		
3.3.5Outcome Expectations	3		
Effort expectation		16-21	
Perceived Ease of Use	3		
Ease of Use	3		
Social influence		22-27	
General Social Influence	3		
Peer Social Influence	3		
Facilitating conditions		28-37	
Perceived Behavioral Control	3		
facilitating Factors	3		
System Compatibility With Individuals	4		
Hedonic motivation		38-46	
User attention	3		
User curiosity	3		
User Enjoyment	3		

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Variable	Total Questions	Question Number	Form/Scale
Intention to use		47-57	
Intention	5		
Prediction	3		
Planning	3		
behavior to use		58-62	
Using experience	3		
Using reaction	2		
Teacher innovativeness		63-68	
Innate Innovativeness	3		
Domain Specific Innovativeness	3		
Perceived trust		69-79	
System quality	5		
Relationship quality	3		
Service quality	3		
TPATK ability		80-88	
Technological Knowledge	3		
Pedagogical Knowledge	3		
Technological Content Knowledge	3		
Pedagogical Content Knowledge	3		
Culture		89-96	
Uncertainty avoidance	3		
Individualism/collectivism	5		

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3.3.2 Scale Development

The research instrument was systematically designed to: Align with the study's research questions; Operationalize the conceptual framework; Incorporate validated measurement items from prior literature. All latent constructs and their corresponding observed variables were developed based on established scales, as detailed in the following table.

Table 3. 15 Scale development table

Latent Variables	Observed Variables	Development of Variables	Research Number of Questions
Performance Expectation	Perceived usefulness Relative Advantage Extrinsic Motivation Job-fit Outcome Expectations	(Venkatesh, Morris, Davis & Davis, 2003) (Venkatesh, Thong & Xu, 2012) (Keeton, Perry-Jenkins & Sayer, 2008) (Wang, Tigelaar & Admiraal, 2019) (Sheikh, Islam, Rana, Hameed & Saeed, 2017) (Tseng, Lin Wang & Liu, 2022)	24
Efforts Expectation	Perceived Ease of Use Ease of Use	(Venkatesh, Morris, Davis & Davis, 2003) (Venkatesh, Thong & Xu, 2012) (Keeton, Perry-Jenkins & Sayer, 2008) (Sheikh, Islam, Rana, Hameed & Saeed, 2017)	7
Social Influence	General Social Influence Peer Social Influence	(Venkatesh, Morris, Davis & Davis, 2003) (Venkatesh, Thong & Xu, 2012) (Al-Gahtani, Hubona & Wang, 2007) (Keeton, Perry-Jenkins & Sayer, 2008) (Sheikh, Islam, Rana, Hameed & Saeed, 2017)	6

Facilitating Conditions	Perceived Behavioral Control	(Venkatesh, Morris, Davis & Davis, 2003) (Venkatesh, Thong & Xu, 2012) (Keeton, Perry-Jenkins & Sayer, 2008) (Sheikh, Islam, Rana, Hameed & Saeed, 2017) (Schmid, Brianza & Petko, 2020)	12
Hedonic Motivation	User Attention User curiosity User Enjoyment	(Venkatesh, Morris, Davis & Davis, 2003) (Venkatesh, Morris, Davis & Davis, 2003) (Keeton, Perry-Jenkins & Sayer, 2008) (Sheikh, Islam, Rana, Hameed & Saeed, 2017) (Schmid, Brianza & Petko, 2020)	11
Teacher Innovativeness	Innate Innovativeness Domain Specific Innovativeness	(Roehrich, 1984) (Zhang, 2017) Xie Ruyu (2022)	9
Perceived Trust	System Quality Relationship Quality Service quality	(Delone & Mclean, 1992) (Yang Shishan, 2012) (Fang, Tang, Ma & Hu, 2018) (Dağhan & Akkoyunlu, 2016) (Ball, Simões Coelho & Machás, 2004) (Lu, 2023)	11
TPACK Ability	Technological Pedagogical knowledge Technological Content knowledge Technological Pedagogical Content knowledge	(Archambault & Crippen, 2009) (Cai, 2021) (Schmid, Brianza & Petko, 2020)	9

Culture	Individualism/ Collectivism	(Jung & Lee, 2020b); (Yavwa & Twinomurinzi, 2018); (Rabaa'i, 2017)	7
	Uncertainty Avoidance	Srite (2006)	
Intention Use	To Intention to use Prediction to use Planning to use	(Venkatesh, Morris, Davis & Davis, 2003), (Venkatesh, Thong & Xu, 2012), (Keeton, Perry-Jenkins & Sayer, 2008), (Wang, Wu & Wang, 2009). Zhou (2012)	11
Behavior Use	To Using experience Using reaction	(Chen & Tang, 2006), (Venkatesh, Thong & Xu, 2012), (Sheikh, Islam, Rana, Hameed & Saeed, 2017)	6

The study employed a 5-point Likert scale to assess respondents' agreement levels, with the following anchored responses:

5 = Strongly agree

4 = Agree

3 = Neutral (Neither agree nor disagree)

2 = Disagree

1 = Strongly disagree

Scale Validation and Interpretation

Theoretical Foundation

Items were adapted from validated instruments in prior literature

Incorporated expert feedback from academic peers

Statistical Interpretation

The response continuum was divided into equal intervals for analysis:

$$\text{Class Interval} = (\text{Maximum} - \text{minimum}) / (\text{Number of Classes}) = (5-1) / 5 = 0.80$$

This 0.80-unit interval formed the basis for establishing evaluation benchmarks (see the following table).

Table 3.16. The Variable Explanation Criteria

Scale Interval(mean)	evaluation criteria			
	Agreement	Frequency	Importance	Quality
4.24-5.00	Strong Agree	Always	Very Important	Excellent
3.43-4.23	Agree	Often	Important	Good
2.62-3.42	Undecided	Sometime	Moderately important	Fair
1.81-2.61	Disagree	Rarely	Slightly important	Poor
1.00-1.80	Strong Disagree	Never	Unimportant	Very Poor

3.4 Quality of Instruments

To ensure methodological rigor, the research instrument underwent comprehensive quality assessment through: Validity Testing (Examination of the questionnaire's ability to accurately measure target constructs); Reliability Analysis (Evaluation of measurement consistency and stability). The following sections detail these validation procedures.

3.4.1 Validity of the Instruments

To assess the validity of the instruments, the Index of Congruence (IOC) was employed. A panel of three experts, comprising both academic researchers and industry practitioners with extensive experience in digital education platforms, was invited to evaluate the appropriateness of each questionnaire item and suggest potential improvements.

Furthermore, the IOC values between individual items and their corresponding variables were statistically calculated. Items with IOC scores exceeding the threshold of 0.5 were deemed valid and retained for further analysis. The detailed computational methodology is elaborated in the following section.

$$IOC = \sum R/N$$

Where:

R= Congruence value of each Question N= the number of experts

1 = Congruent

0= Uncertainty

-1= In congruent

The Index of Congruence (IOC) ranges from -1 to +1, with values closer

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to +1 indicating stronger validity. Based on established criteria (Turner & and Carlson, 2003), items scoring below 0.6 underwent revision, while those with an IOC below 0.5 were eliminated from the final questionnaire. The IOC classification was as follows:

+1= the questions were found to be congruent with the content

0= the questions are uncertain if the questions would be congruent with the content

-1=the questions are found to be in congruent with the content

The consideration criteria for the IOC were as follows:

1. Questions having IOC between 0.5-1.00= Valid and can be used

2. Questions with IOC below 0.5 = To be revised

To ensure the reliability and validity of the instrument, the questionnaire was evaluated by a panel of three experts, including two professors and one industry specialist, all with extensive expertise in information systems and technology. Their role was to assess the clarity, relevance, and comprehensibility of each item.

Following initial feedback, the questionnaire was revised and resubmitted for a second round of evaluation. After this reassessment, all items achieved an IOC score exceeding 0.5, confirming their suitability for inclusion in the final survey instrument.

3.4.2 Reliability of the Instruments

To assess the internal consistency reliability of the instrument, Cronbach's alpha coefficient was computed for the entire questionnaire. Following established psychometric standards (Gliem & Gliem, 2003), a minimum threshold of $\alpha > 0.7$ was adopted to indicate acceptable reliability. The evaluation of scale reliability was conducted based on the following criteria:

Table 3.17. Cronbach's Alpha Criteria

Cronbach's Alpha	External Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable

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$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: Gliem & Gliem, (2003)

The formula for developing the Cronbach's alpha is presented by (Gliem & Gliem,2003). The coefficient of alpha ranges from 0 - 1 were, as presented in the above criteria.the higher the Cronbach's alpha, the better the reliability of the questions. The calculations are presented below:

$$a = \frac{K}{K - 1} \left[1 - \frac{\sum S_i^2}{S_t^2} \right]$$

Where:

a = Reliability coefficient

k= the number of questions of the instrument

S_i^2 = Variance of score in each question

S_t^2 = Variance of total score of all respondents

In the interpretation of results, the Cronbach's alpha coefficient would be considered acceptable if it is above 0.70. However, if it is below 0.7. it would be necessary to re-evaluate the questions of the questionnaire.

To check the accuracy and internal consistency of the instruments, two tests were conducted; first with a pilot study sample (n = 30) and the actual data for China, The researcher used SPSS version 26 to conduct Cronbach's tests, and the results were 0.923, which was above 0.70 (See the below table)The questionnaire, according to Cronbach (1951), was excellently reliable.

Table 3.18. Cronbach's Alpha from a Pilot Study(n=30)

		n	%
Cases	Valid	30	100.0
	Excluded ^a	0	0

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Total	30	100.0
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a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.923	0.923	113

Based on the validity and reliability analysis presented above, it was conclusive that the questionnaire instrument was suitable to conduct the current study. Therefore, the questionnaire was used to correct data for the study in China. The final questionnaire is presented in Appendix B.

3.5 Data Collection

3.5.1 Quantitative Data Collection

The following procedure was adopted in the data collection process.

Primary Data

The study commenced with a formal authorization process involving multiple stakeholders. Initial institutional approval was secured from:

Dr.Saichon Pinmanee and Dr. Singha Chaveesuk,advisor in King Mongkut's Institute of Technology Latkrabang (KMITL) Business School

Subsequent ethical clearance was obtained from Tongren Polytechnic University in China. Each entity's management provided written consent authorizing:

Data collection from employees/staff

Investigation of digital education platform adoption within their operational frameworks

2. Following institutional approvals, the research team disseminated the digital questionnaire to the predetermined sample population via secure online platforms. Participation was voluntary, with all respondents providing informed consent prior to completing the web-based survey instrument.

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3. The protocol incorporated a rigorous quality control process:

Initial screening for response completeness and validity

Systematic data collation from qualified responses

Subsequent quantitative analysis using appropriate statistical methods

The protocol incorporated a rigorous quality control process:

Initial screening for response completeness and validity

Systematic data collation from qualified responses

Subsequent quantitative analysis using appropriate statistical methods

Secondary Data

This study incorporated secondary data derived from multiple scholarly sources, including:

Theoretical frameworks and conceptual literature

Peer-reviewed journal articles and academic publications

Statistical reports and empirical studies

Works by both national and international researchers

These secondary sources served three primary research functions:

Foundation for theoretical framework development

Basis for research objectives and hypothesis formulation

Comparative reference for analyzing and contextualizing primary findings in the discussion section.

3.6 Data Analysis

3.6.1 Quantitative Data Analysis

Upon collection of completed questionnaires from all respondents, the data underwent rigorous analysis to assess accuracy, validity, and reliability. The analytical process included:

Data Cleaning: Missing values were systematically identified and excluded to ensure dataset completeness.

Outlier Detection: Statistical techniques were applied to detect and remove anomalous observations that deviated significantly from the expected distribution.

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Data Consistency Check: Values inconsistent with the overall dataset were examined and discarded to maintain analytical integrity.

A 5% significance level ($\alpha = 0.05$) was adopted for hypothesis testing, ensuring robust statistical evaluation. The analysis followed a structured methodological approach, as detailed below:

1. Descriptive Statistical Analysis

Descriptive statistics were computed to summarize key characteristics of the variables, including:

Central Tendency: Mean, median, mode

Dispersion: Standard deviation, percentiles, minimum and maximum values

Distribution Shape: Skewness and kurtosis

This preliminary analysis provided essential insights into the dataset's behavior before advanced statistical modeling.

2. Diagnostic Testing

Diagnostic tests were performed to verify the statistical robustness of the data. Key assessments included:

Normality Test: Following Greene (2008), residuals in linear regression were examined for normal distribution using skewness and kurtosis measures (Holland & Crawley-Boevey, 1998).

3. Correlation Analysis

Pearson's correlation coefficient was employed to examine relationships among study variables. This preliminary step was crucial for subsequent Structural Equation Modeling (SEM) in assessing factors influencing digital education platform adoption in China.

4. Model Fit Analysis

To assess the congruence of the proposed conceptual framework—"Factors Influencing Behavioral Intention to Use Digital Education Platforms in China Based on the Extended UTAUT2 Model"—a confirmatory analysis was conducted using AMOS (Analysis of Moment Structures). This structural equation modeling (SEM) approach evaluated the model's fit by examining key indices, including:

Absolute fit measures (e.g., χ^2 , RMSEA, GFI), not allowed for commercial use.

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Incremental fit indices (e.g., CFI, TLI)

Parsimony-adjusted metrics (e.g., AIC, BIC)

The analysis validated the theoretical structure of the extended UTAUT2 model, ensuring its suitability for explaining user adoption behavior in the context of digital education platforms in China.

Table 3.19 Levels of the Correlation coefficient

Correlation Coefficient (r)	Levels of relationships
$r > 0.8$	Very high
$0.6 < r < 0.8$	Quite high
$0.4 < r < 0.6$	Moderate
$0.2 < r < 0.4$	Quite low
$r < 0.2$	Low

source: Akram, Aimal & Munir (2008)

3.6.2 Statistics for Analysis

3.6.2.1 Objectives Analysis

This section illustrates the statistical techniques that was applied in the analysis of each of the research objectives.

For Objective 1, which empirically investigated the effects of behavioral intention to use digital education platforms in China, the structural equation model (SEM) was used to conduct the analysis. To reveal the SEM of the conceptual framework for digital education platform resources used by rural teachers in china.

For Objective 2, which was to empirically determine the moderation effect of culture on behavioral intention to use digital education platforms in China, the SEM analysis with gender, experience and culture as a moderator variable was used.

For Objective 3, which was to to develop a technology acceptance model for the behavioral intention to use digital education platform in China..

For Objective 4, which was to empirically determine the effects of behavioral intention to use digital education platform in China.

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To answer the first research question of “What are the factors influencing the behavioral and intention to use digital education platforms in China?” the structural equation modeling (SEM) was applied. To answer the second research question, “What is the difference between China in terms of factors influencing the behavioral and intention to use digital education platforms?” the SEM multi-group analysis was applied. The details are given in the following section.

3.6.2.2 Confirmatory Factor Analysis (CFA)

A Confirmatory Factor Analysis (CFA) was conducted to evaluate the model's fit and assess the scale's accuracy by examining the relationships among latent variables, observed variables, mediating variables, and endogenous variables. This analysis employed covariance-based structural equation modeling (SEM) to validate the measurement model's robustness and ensure the theoretical framework's alignment with empirical data.

Table 3.20. Congruence Evaluation Table between the conceptual framework and empirical data

Statistics	Symbol	Objectives	Statistics showing congruence between empirical data and conceptual framework
Relative Chi-square	λ^2 / df	To test the congruence of empirical data and conceptual framework	$X/df < 5.00$
Goodness of Fit Index	GFI	To measure GF. between 0-1.00	>0.90
Comparative Fit Index	CFI	To Compares the fit of a target model to the fit of an	>0.90

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Statistics	Symbol	Objectives	Statistics showing congruence between empirical data and conceptual framework
		independent, or null, model	
Normed Fit Index	NFI	Measures NFI between 0 and 1	>0.90
Tucker Lewis index	TLIR	To measure TLI, between 0-1.00	>0.90
Root mean square of approximation	MSEA	To show conceptual framework errors in for of RMSEA between 0-100	<0.05

Source: (Wheaton, Muthen, Alwin & Summers, 1977)

3.6.2.3 The structural Equation Modeling (SEM)

To examine the primary research objectives concerning teachers' behavioral intention to adopt digital education platforms, this study employed Structural Equation Modeling (SEM). This quantitative technique integrates Perceived Trust, Innovation Diffusion Theory (IDT), and Technological Pedagogical Content Knowledge (TPACK) into the extended Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) framework. SEM is particularly suited for analyzing complex causal relationships among latent constructs, as hypothesized in this study.

Methodological Approach

The SEM analysis comprised three key components:

Measurement Model Evaluation

Assessed the relationships between latent independent variables (e.g., performance expectancy, effort expectancy) and dependent variables (behavioral intention).

Conducted separately for the China dataset to ensure cultural specificity.

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Moderation Analysis

Examined the influence of moderating variables (culture, experience, gender) on the relationships between latent constructs.

Analyzed independently for the China dataset to account for contextual differences.

Hypothesis Testing via Partial Least Squares SEM (PLS-SEM)

Adopted PLS-SEM, a variance-based SEM approach, for its robustness in predictive modeling and flexibility with non-normal data distributions (Haenlein & Kaplan, 2004).

Unlike covariance-based SEM (CB-SEM), PLS-SEM does not require strict assumptions regarding data normality or sample size, making it ideal for exploratory research (Joe F. Hair, Sarstedt, Hopkins & Kuppelwieser, 2014).

Enabled simultaneous testing of reflective and formative indicators, a limitation of CB-SEM (Latan & Ghazali, 2012).

Theoretical and Practical Justifications

Predictive Accuracy: PLS-SEM prioritizes explanation of variance in dependent variables, aligning with this study's focus on behavioral prediction (Wong, Russo & McDowall, 2013).

Flexibility: Accommodates mixed data types (ordinal, interval, ratio) and smaller samples (Hellberg, 1985).

Robustness: Minimizes bias from model misspecification, ensuring reliable parameter estimates (Latan & Ghazali, 2012).

This analytical framework rigorously validated the hypothesized relationships while accounting for the unique socio-technical context of digital education adoption in China.

The selection of Partial Least Squares Structural Equation Modeling (PLS-SEM) as the primary analytical technique was based on several methodological advantages pertinent to this research:

Flexibility in Measurement Models

The PLS algorithm accommodates both reflective and formative relationships between indicators and latent constructs, overcoming a key limitation of covariance-based SEM approaches.

Path Model Estimation Capability

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PLS provides robust estimation of complex path models, enabling examination of direct and indirect effects among study variables.

Handling of Complex Model Structures

The technique demonstrates particular strength in analyzing models containing numerous latent and manifest variables without encountering estimation problems common to alternative methods.

Distributional Robustness

PLS remains effective with non-normally distributed data, including highly skewed distributions that violate parametric assumptions.

Moderator Variable Analysis

The approach permits direct calculation of moderator effects, which was essential for testing the hypothesized cultural moderators in our conceptual framework.

Descriptive Statistical Analysis

The initial section of the questionnaire, capturing respondent characteristics, was analyzed using descriptive statistics:

For nominal-scale variables (gender, educational background, management level, fintech business type), frequency distributions and percentages were computed.

For ordinal variables (age, organizational tenure), similar non-parametric techniques were employed, as calculation of means and standard deviations would be statistically inappropriate for such data types.

Two-Stage PLS Analytical Procedure

The PLS analysis was conducted through a systematic two-phase approach:

Phase 1: Measurement Model Evaluation

Assessed construct validity through examination of indicator loadings and cross-loadings
 Evaluated reliability using composite reliability coefficients and Cronbach's alpha values
 Established discriminant validity via the Fornell-Larcker criterion and heterotrait-monotrait (HTMT) ratios

Phase 2: Structural Model Testing

Examined hypothesized relationships between constructs through path coefficient analysis

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Assessed statistical significance using bootstrapped t-tests (5,000 subsamples)

Evaluated model predictive power through R^2 values and effect sizes (f^2)

Tested moderator effects through interaction term analysis

This rigorous analytical approach ensured both the measurement quality of our constructs and the robustness of our theoretical conclusions regarding digital education platform adoption drivers. The methodology aligns with contemporary best practices in variance-based SEM (Hair, Ringle, & Sarstedt, 2011) while addressing the specific requirements of our research context.

A. Measurement (Outer) Model

The measurement model, alternatively termed the outer model, establishes the relationships between observed indicators and their corresponding latent constructs. This study employed a rigorous Multi-Trait Multi-Method (MTMM) approach within the confirmatory factor analysis framework to comprehensively assess both convergent and discriminant validity.

For reliability assessment, we implemented a dual-metric evaluation system:

Internal Consistency Reliability:

Measured via Cronbach's alpha coefficient

Provides evidence of indicator intercorrelation within each construct

Composite Reliability:

Calculated using the construct's indicator loadings

Offers a more robust reliability estimate that accounts for differing indicator weights

This methodological approach aligns with established psychometric standards in structural equation modeling (Latan & Ghozali, 2012), ensuring both the reliability and validity of our measurement instruments. The comprehensive validation process guarantees that each latent variable is appropriately represented by its designated indicators while maintaining clear differentiation between distinct constructs.

a. Validity test

A questionnaire's validity is evaluated using a validity test, A questionnaire is deemed to be valid if its questions can provide light on the subject it is intended to measure. All questions in each variable are put through a validity test. Testing will be done at various

phases, including convergent validity, average variance extracted (AVE), and discriminant validity.

1. Content Validity

To ensure the validity of the questionnaire, this study employed a well-established instrument that has been extensively utilized in prior research. The questionnaire was developed through a comprehensive literature review, with appropriate modifications implemented to mitigate potential response biases stemming from participants' predispositions toward specific preferences.

2. Convergent Validity

Convergent validity is assessed by examining the degree to which the indicators of a construct demonstrate consistency in measuring the same underlying dimension. This is evaluated by analyzing the relationship between individual item scores (component scores) and their corresponding construct scores, which yields factor loading values.

For a measurement model to exhibit strong convergent validity:

Factor loadings should be statistically significant, exceeding twice the standard error in relation to the study variable.

Ideally, item-construct correlations should surpass 0.70, indicating high reliability. However, loadings between 0.50 and 0.60 remain acceptable during the scale development phase (Latan & Ghozali, 2012).

Additionally, Average Variance Extracted (AVE) should exceed 0.50, and each item's loading should also be above 0.50 (Segars, 1997), further confirming convergent validity.

3. Average Variance Extracted (AVE)

Convergent validity is evaluated by examining the Average Variance Extracted (AVE), which measures the proportion of variance captured by a construct relative to measurement error. The AVE represents the mean variance shared between a latent variable and its indicators, serving as a key metric for assessing convergent validity.

For a construct to demonstrate adequate convergent validity, the AVE should exceed 0.50 (Segars, 1997), indicating that the construct explains more than half of the variance in its indicators.

4. Discriminant Validity

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Discriminant validity assesses the degree to which two conceptually distinct constructs are empirically differentiated. This can be evaluated through multiple approaches:

Cross-loading analysis:

Indicators should exhibit stronger correlations with their assigned construct than with other constructs in the model.

Discriminant validity is supported if each indicator's loading on its intended construct exceeds its cross-loadings on other constructs.

Inter-construct correlation comparison:

A construct demonstrates discriminant validity if its correlation with its own indicators is higher than with indicators of other constructs.

Fornell-Larcker criterion:

The square root of the Average Variance Extracted (AVE) for each construct should exceed the construct's correlations with all other constructs in the model (Ghozali, 2008).

When these conditions are met, the measurement model is considered to have adequate discriminant validity, confirming that the constructs are empirically distinct.

b. Reliability Test

In addition to validity testing, measurement model evaluation includes reliability assessment to examine a construct's dependability. Reliability refers to the consistency and stability of measurement instruments in capturing the intended construct across repeated measurements (Sekaran & Bougie, 2017). A reliable instrument produces consistent results and can be trusted to yield accurate measurements over time.

It should be under the CB-SEM approach. two primary metrics assess reliability for constructs with reflective indicators:

Composite Reliability:

Should exceed 0.70 to demonstrate adequate internal consistency (Latan & Ghozali, 2012)

Represents the shared variance among a set of observed variables measuring an underlying construct

Cronbach's Alpha:

Values above 0.70 indicate satisfactory reliability (Latan & Ghozali, 2012)

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While more lenient thresholds ($\alpha > 0.60$) may be acceptable in exploratory research (Malhotra, 1996)

These reliability coefficients confirm whether measurement items consistently represent their respective constructs, with higher values indicating greater measurement precision. A composite reliability value of 0.70 or above suggests the construct measurements are trustworthy for research purposes.

B. Structural Model (Inner Model)

The inner model (also referred to as the structural model or substantive model) represents the hypothesized relationships between latent constructs, as grounded in theoretical foundations. This model specification examines the strength and significance of theoretical linkages among constructs.

Structural model evaluation employs several key analytical approaches:

1. Path Coefficient Analysis:

Significance testing via t-statistics derived from bootstrapping procedures
Examination of standardized beta coefficients to assess relationship strength

2. Predictive Power Assessment:

R² values for endogenous constructs to evaluate explanatory power

Stone-Geisser Q² test (Geisser, 1974; Stone, 1974) to assess predictive relevance through blindfolding procedures

3. Model Fit Evaluation:

Goodness-of-fit indices for overall model adequacy

Statistical significance of structural path parameters

These analyses collectively determine the empirical support for theoretically-derived relationships while evaluating the model's predictive capabilities.

a. R-Square

In the structural model assessment, the R-square value for each endogenous latent variable should first be examined to evaluate the model's predictive accuracy. As a goodness-of-fit measure, R-square reflects the proportion of variance explained by the exogenous constructs. Similar to multiple regression analysis, this metric indicates the predictive power of the structural model. The magnitude of R-square changes can reveal

whether specific exogenous latent variables exert a significant influence on endogenous constructs. According to Latan and Ghazali (2012), R-square values of 0.75, 0.50, and 0.25 indicate substantial, moderate, and weak predictive strength, respectively. Furthermore, variations in R-square provide insight into the substantive impact of independent latent variables on dependent constructs (Ghozali, 2008). Beyond R-square, the PLS model is also evaluated using the predictive relevance measure Q-square, which assesses how well the model and its parameter estimates reconstruct the observed values. Overall, the inner or structural model can be evaluated based on the R-square value, which reflects the extent of explanatory relationships among the variables in the model.

b. F-Square

The f-square test was conducted to evaluate the robustness of the model. According to Ghazali (2008), f-square values of 0.02, 0.15, and 0.35 indicate that the predictive latent variable exerts a weak, moderate, or strong level of influence, respectively, within the structural model.

c. Estimate For Path Coefficients

The bootstrapping method is subsequently employed to assess the statistical significance of the path relationships between variables. This is achieved by evaluating the parameter coefficients along with their corresponding t-statistics (Latan & Ghazali, 2012). The path coefficient, which quantifies the strength and direction of a relationship in the structural model, is derived through the bootstrapping procedure. A path is considered statistically significant if its t-value exceeds 1.96 at the 5% significance level or 1.65 at the 10% significance level.

C. Hypothesis test

In this study, structural equation modeling (SEM) via SmartPLS is employed for hypothesis testing. The SEM approach not only provides theoretical support but also elucidates relationships among latent variables within the overall model (Ghozali, 2008). Hypothesis evaluation is conducted by examining the estimated path coefficients during inner model assessment. A hypothesis is considered supported if the computed t-statistic exceeds the critical value of 1.96 at a 5% significance level. Furthermore, the analysis also assesses the significance of indirect effects between variables. Using SmartPLS 3.0, the bootstrapping

method is applied to perform these tests. The intervening variables in this research comprise trust and attitude. Mediation is established if the p-value is below 0.05 and the t-statistic surpasses the critical value, indicating that the intervening variables significantly mediate the effect of exogenous variables on the endogenous variable.

Amos version 26 was applied to conduct the statistical analysis.

3.7 Secondary Research

Following the quantitative data analysis, a secondary research analysis was undertaken to corroborate the findings derived from the quantitative results. The qualitative analysis was exclusively based on secondary data sourced from prior studies relevant to the research topic. These sources encompassed scholarly books, peer-reviewed journal articles, academic publications, official statistical data, and other accredited references. The secondary data were instrumental in formulating the research objectives, defining the research questions, and establishing the study's hypotheses.

3.8 Ethical Considerations

Ethical considerations were rigorously upheld throughout all stages of this study. Prior to data collection, the researcher obtained all necessary permissions from the relevant institutional bodies. Data usage was strictly confined to the explicitly stated research objectives. All personally identifiable information provided by respondents was treated as confidential and was not disclosed to any third party. The privacy and dignity of all participants were safeguarded through stringent measures to ensure the complete confidentiality of collected information.

3.9 Conclusions

This chapter has outlined the research methodology employed in the present study. A mixed-methods approach was adopted, integrating both quantitative and qualitative strategies.

For the quantitative component, primary data were gathered through questionnaires administered to a representative sample. These data were subsequently analyzed using statistical techniques, including structural equation modeling (SEM) and correlation analysis. The qualitative dimension relied on extant literature pertinent to the research topic, such as scholarly books, peer-reviewed journal articles, academic publications, and conference presentations. Descriptive statistical methods were applied to analyze the qualitative data.



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CHAPTER 4

ANALYSIS AND FINDINGS

4.1 Introduction

This chapter contributes to the fulfillment of the research objectives by analyzing and presenting findings on factors influencing rural teachers' intention and usage behavior regarding digital education platforms in China, based on the UTAUT2 model. The chapter is structured as follows: The first section provides descriptive statistics of the demographic variables. The second section presents descriptive analyses of respondents' perceptions concerning the study's constructs, namely performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, teacher innovativeness, perceived trust, TPACK ability, culture, intention to use, and usage behavior. The third section evaluates the research models through correlation analysis and assessment of model fit. The fourth section reports the outcomes of the Structural Equation Modeling (SEM), followed by a chapter summary.

The study was conducted in China with an initial target sample size of 600 respondents. As a result of online data collection, a total of 613 valid responses were obtained.

The analysis is organized into distinct parts, each presented separately:

Analysis of demographic statistics.

Descriptive analysis of respondents' views on each research construct.

Test for Normality and Correlation Analysis.

Evaluation of the measurement model, including Confirmatory Factor Analysis (CFA).

Validity and reliability analyses.

Presentation of SEM analysis results.

4.2 Analysis & Findings

4.2.1 Descriptive Statistics

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The demographic characteristics of the sample are summarized in Table 4.1. According to the collected data, 48.5% of the respondents were male and 51.5% were female. In terms of age distribution, the largest group consisted of individuals aged 21 – 30 years, accounting for 51.3% of the sample, followed by those aged 31 – 40 years, who represented 21.2%. No respondents were older than 60 years.

Table 4.1 Descriptive Statistics

	n	%
Gender		
Male	297	48.5%
Female	315	51.5%
Non-binary	0	0
Age		
21-30 years	314	51.3%
31-40 years	130	21.2%
41-50 years	99	16.2%
51-60 years	69	11.3%
Teaching experience		
<5 years	144	23.5%
5-20 years	375	61.3%
>20 years	93	15.2%
Lecture Section		
Kindergarten	127	20.8%
Primary school	414	67.6%
Junior middle school	30	4.9%
Senior High school	41	6.7%
Location of current residence		
East	122	19.9%

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	n	%
Central south	208	34.0%
North	74	12.1%
Northeast	25	4.1%
West north	75	12.3%
West south	108	17.6%
Computer Knowledge		
Very Poor	0	0
Poor	62	10.1%
Moderate	512	83.7%
Good	38	6.2%
Very Good	0	0
Internet Knowledge		
Very Poor	0	0
Poor	40	6.5%
Moderate	516	84.3%
Good	56	9.2%
Very Good	0	0
Internet Consumer		
Less than 1 hour	36	5.9%
1-2 Hours	119	19.4%
2-3 hours	148	24.2%
More than 3 hours	309	50.5%
Using Internet		
Less than 1 year	18	2.9%
1-3 years	36	5.9%
More than 3 years	558	91.2%

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To facilitate data collection, multiple locations across China were selected for this study. A stratified sampling technique was employed, with the number of respondents from each location determined proportionally based on the population of rural teachers in the respective areas.

Regarding computer knowledge, which was assessed on a five-point scale ranging from very poor to very good, the majority of respondents in China (83.7%) reported a moderate level of proficiency. Similarly, in terms of internet knowledge, 84.3% of participants indicated moderate familiarity.

The study also examined internet consumption patterns. It was found that 50.5% of respondents spent more than three hours online per day. Additionally, with respect to internet usage experience, 91.2% reported having used the internet for over three years.

4.2.2 Respondents Opinions in China

This section analyzes respondents' feedback pertaining to the latent variables and their corresponding observed indicators. The study incorporated a total of 11 latent constructs, namely: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, teacher innovativeness, perceived trust, TPACK ability, culture, intention to use, and usage behavior.

Performance Expectation

In the respondents' reviews for the performance expectation latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.2 Performance Expectation Respondents Opinion

Performance Expectation	Opinion Level					Mean	Std. Level
	1	2	3	4	5		
	Frequency(n)&Percentages(%)						
Perceived usefulness						3.59	.91 Agree
Using platform resource enables me	n	35	78	171	205	123	3.50 1.12 Agree

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Performance Expectation	Opinion Level							Mean	Std. Level
	1	2	3	4	5				
	Frequency(n)&Percentages(%)								
to accomplish my learning activities more quickly	%	5.7	12.7	27.9	33.5	20.1			
Using platform resource improves my learning performance (i.e., develop new skills, techniques, and gain experience)	n	33	78	127	117	257	3.80	1.26	Agree
	%	5.4	12.7	20.8	19.1	42.0			
Using platform increases productivity in my learning activities(i.e.,able to learn and understand a large amount of information)	n	36	65	176	207	128	3.53	1.11	Agree
	%	5.9	10.6	28.8	33.8	20.9			
Using platform enhances my effectiveness in my learning activities(i.e.,gain comprehensive knowledge and greater understanding about course being studied for improving grades and academic performance)	n	37	57	177	208	133	3.56	1.11	Agree
	%	6.0	9.3	28.9	34	21.7			
Using platform would make it easier to compete my courses and modules faster	n	21	99	158	222	112	3.50	1.07	Agree
	%	3.4	16.2	25.8	36.3	18.3			
I would find platform resource useful in my learning activities	n	14	50	232	186	130	3.60	0.98	Agree
	%	2.3	8.2	37.9	30.4	21.2			
Relative Advantage							3.70	.89	Agree
Using platform resource enables me	n	44	59	140	83	286	3.83	1.30	Agree

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Performance Expectation	Opinion Level							Mean	Std. Level
	1	2	3	4	5				
	Frequency(n)&Percentages(%)								
to learn more quickly as compared to traditional classroom	%	7.2	9.6	22.9	13.6	46.7			
Using platform resource improves the quality of my learning activities(i.e., to achieve better grades and improve academic performance)	n	1	38	209	219	145	3.77	.89	Agree
	%	0.2	6.2	34.2	35.8	23.7			
Compared with the traditional learning, using the digital education platform resources can give me the freedom to learn	n	18	58	185	149	202	3.75	1.10	Agree
	%	2.9	9.5	30.2	24.3	33.0			
I am able to acquire information using platform for my learning activities	n	16	79	113	254	150	3.72	1.05	Agree
	%	2.6	12.9	18.5	41.5	24.5			
I am able to obtain the latest knowledge in education-related issues using platform	n	28	84	166	252	82	3.45	1.03	Agree
	%	4.6	13.7	27.1	41.2	13.4			
Extrinsic Motivation							3.60	.96	Agree
Using platform resource can increase wages	n	46	90	133	199	144	3.50	1.20	Agree
	%	7.5	14.7	21.7	32.5	23.5			
Using the platform resources can help to work	n	38	90	133	182	171	3.56	1.21	Agree
	%	5.9	14.7	21.7	29.7	27.9			
Using platform resources can increase opportunities for promotion.	n	36	90	133	182	171	3.59	1.20	Agree
	%	5.9	14.7	21.7	29.7	27.9			
I am able to learn through interactive discussions from using platform	n	16	52	189	214	141	3.67	1.00	Agree
	%	2.6	8.5	30.9	35.0	23.0			

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Performance Expectation	Opinion Level							Mean	Std. Level	Agree
	1	2	3	4	5					
	Frequency(n)&Percentages(%)									
I am able to generate an environment of trust using platform	n	39	57	135	201	180	3.70	1.17	Agree	
	%	6.4	9.3	22.1	32.8	29.4				
Job-fit							3.70	1.00	Agree	
The platform resources are close to my work field	n	5	82	103	231	191	3.85	1.03	Agree	
	%	0.8	13.4	16.8	37.7	31.2				
Using platform resources can increase work output	n	23	116	126	151	196	3.62	1.22	Agree	
	%	3.8	19.0	20.6	24.7	32.0				
Platform resources can be used in conjunction with textbooks and other resources	n	42	89	100	201	180	3.63	1.24	Agree	
	%	6.9	14.5	16.3	32.8	29.4				
Outcome Expectations							3.50	.87	Agree	
If I use platform resource I will increase the chances of getting higher marks on test and exams for the same amount of effort.	n	31	24	214	215	128	3.63	1.02	Agree	
	%	5.1	3.9	35.0	35.1	20.9				
If I use platform resource, my classmates will perceive me as competent.	n	48	49	253	145	117	3.38	1.12	Agree	
	%	7.8	8.0	41.3	23.7	19.1				
If I use platform resource, I will increase my chances of advancing to the next level.	n	33	72	225	185	97	3.39	1.06	Agree	
	%	5.4	11.8	36.8	30.2	15.8				
I am able to assimilate research and education related issues using platform.	n	35	52	167	232	126	3.59	1.08	Agree	
	%	5.7	8.5	27.3	37.9	20.6				
I am able to share important	n	48	29	216	217	102	3.48	1.07	Agree	
	%									

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Performance Expectation	Opinion Level						
	1	2	3	4	5	Mean	Std. Level
	Frequency(n)&Percentages(%)						
knowledge using platform.	%	7.8	4.7	35.3	35.5	16.7	
Overall						3.61	.74 Agree

Performance expectation was assessed through five observed variables: perceived usefulness, relative advantage, extrinsic motivation, job-fit, and outcome expectations.

Regarding perceived usefulness, the highest-rated item was “Using platform resources improves my learning performance (e.g., developing new skills, techniques, and gaining experience)” with a mean of 3.80, followed by “I would find platform resources useful in my learning activities” (mean = 3.60). The overall mean for this dimension was 3.59 with a standard deviation of 0.91.

For relative advantage, the statement “Using platform resources enables me to learn more quickly compared to traditional classroom methods” received the highest rating (mean = 3.83). The dimension had an overall mean of 3.70 and standard deviation of 0.89.

The highest-rated item within extrinsic motivation was “I am able to generate an environment of trust using the platform” (mean = 3.70). The overall mean for extrinsic motivation was 3.60 (SD = 0.96).

Concerning job-fit, the statement “The platform resources are closely related to my work field” obtained the highest score (mean = 3.85), with an overall mean of 3.70 (SD = 1.00).

For outcome expectations, the item “If I use platform resources, I will increase my chances of achieving higher marks on tests and exams with the same amount of effort” was rated highest (mean = 3.63). This dimension had an overall mean of 3.50 (SD = 0.87).

The composite mean for performance expectation was 3.59 with a standard deviation of 0.91.

Efforts Expectation

In the respondents’ reviews for the efforts expectation latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly

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Agree.

Table 4.3 Efforts Expectation Respondents Opinion

Efforts Expectation	Opinion Level					Mea n	Std. Dev.	Level
	1	2	3	4	5			
	Frequency(n)&Percentages(%)							
Perceived Ease of Use						3.59	.87	Agree
Learning to operate platform resource would be easy for me.	n 15	71	179	221	126	3.61	1.02	Agree
	% 2.5	11.6	29.2	36.1	20.6			
I find platform resource to be flexible to interaction with.	n 6	40	215	301	50	3.57	0.77	Agree
	% 1.0	6.5	35.1	49.2	8.2			
It is easy for me to become skillful at using platform resource.	n 40	76	107	255	134	3.60	1.15	Agree
	% 6.5	12.4	17.5	41.7	21.9			
I feel confident in my ability to learn using platform.	n 33	35	203	219	122	3.59	1.04	Agree
	% 5.4	5.7	33.2	35.8	19.9			
Ease of Use						3.60	.90	Agree
I believe I require little effort to understand how platform resource works.	n 25	39	266	170	112	3.50	1.00	Agree
	% 4.1	6.4	43.5	27.8	18.3			
I often use the platform resources.	n 28	43	221	166	154	3.61	1.08	Agree
	% 4.6	7.0	36.1	27.1	25.2			
Overall, I believe that the platform resource is easy to use.	n 16	71	146	241	138	3.68	1.03	Agree
	% 2.6	11.6	23.9	39.4	22.5			
Overall						3.59	.78	Agree

Effort expectation was measured using two observed variables: perceived ease of use and ease of use. The highest-rated statement under perceived ease of use was “Learning to operate the platform resource would be easy for me,” with a mean score of 3.61. This dimension

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attained an overall mean of 3.59 and a standard deviation of 0.87. Regarding ease of use, the item “Overall, I believe that the platform resource is easy to use” received the highest rating (mean = 3.68). The overall mean for ease of use was 3.60, with a standard deviation of 0.90. The composite score for effort expectation yielded a mean of 3.59 and a standard deviation of 0.78.

Social Influence

In the respondents’ reviews for the social influence latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.4 Social Influence Respondents Opinion

Social Influence	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
General Social Influence						3.56	.89	Agree	
People who influence my behavior think that I should use platform resource.	n	26	42	186	232	126	3.64	1.02	Agree
	%	4.2	6.9	30.4	37.9	20.6			
People who are important to me think I should platform resource.	n	46	60	174	232	100	3.46	1.11	Agree
	%	7.5	9.8	28.4	37.9	16.3			
My school supports me to use the platform resources.	n	27	20	233	226	106	3.59	.96	Agree
	%	4.4	3.3	38.1	36.9	17.3			
Peer Social Influence						3.74	.88	Agree	
Learner's who use platform resources enjoy more prestige than those who do not.	n	16	21	242	181	152	3.71	.97	Agree
	%	2.6	3.4	39.5	29.6	24.8			
Learner's who use platform resources enjoy higher profile than those who do not.	n	14	25	198	193	182	3.82	.98	Agree
	%	2.3	4.1	32.4	31.5	29.7			

My peers、 leaders and teachers think	n	18	47	202	185	160	3.69	1.03	Agree
that I should use platform resources	%	2.9	7.7	33.0	30.2	26.1			
Overall							3.65	.78	Agree

The latent variable of social influence was assessed through two observed variables: general social influence and peer social influence. In the Chinese context, the highest-rated item under general social influence was “People who influence my behavior think that I should use platform resources,” with a mean score of 3.64. This dimension exhibited an overall mean of 3.56 and a standard deviation of 0.89. For peer social influence, the statement “Learners who use platform resources enjoy higher status than those who do not” received the highest rating, with a mean of 3.82. The overall mean for peer social influence was 3.74 (SD = 0.88). The composite social influence construct yielded a mean of 3.65 and a standard deviation of 0.78.

Facilitating Conditions

In the respondents’ reviews for the facilitation conditions latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.5 Facilitating Conditions Respondents Opinion

Facilitating Conditions	Opinion Level					Std. Dev.	Level
	1	2	3	4	5		
Perceived Behavioral Control						3.66	.88 Agree

Facilitating Conditions	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
I have necessary to use the platform resources.	n	34	58	144	220	156	3.66	1.12	Agree
	%	5.6	9.5	23.5	35.9	25.5			
I have the necessary knowledge to use platform systems.	n	20	63	143	246	140	3.69	1.04	Agree
	%	3.3	10.3	23.4	40.2	22.9			
I have mastered the knowledge and skills to using platform resources.	n	26	31	188	212	155	3.72	1.03	Agree
	%	4.2	5.1	30.7	34.6	25.3			
I have the knowledge necessary to use the platform resources.	n	26	26	241	205	114	3.58	.98	Agree
	%	4.2	4.2	39.4	33.5	18.6			
Facilitating Conditions							3.63	.81	Agree
Guidance is available to me in the selection of platform resources.	n	25	41	227	181	138	3.60	1.04	Agree
	%	4.1	6.7	37.1	29.6	22.5			
It is necessary to guide me specifically on the use of digital platform resources.	n	19	27	195	231	140	3.73	.97	Agree
	%	3.1	4.4	31.9	37.7	22.9			
Specialized instruction concerning the platform was available to me.	n	39	33	197	252	91	3.53	1.02	Agree
	%	6.4	5.4	32.2	41.2	14.9			
I can get the support from a specific person/group when I face difficulties with platform resources.	n	31	25	202	230	124	3.64	1.01	Agree
	%	5.1	4.1	33.0	37.6	20.3			
Using platform fits my learning	n	18	38	178	277	101	3.66	.93	Agree
	%	2.9	6.2	29.1	45.3	16.5			

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Facilitating Conditions	Opinion Level					Mean	Std. Dev.	Level
	1	2	3	4	5			
system compatibility with individuals						3.66	.76	Agree
The resource content of the education platform is compatible with my research field	n	12	18	198	271	113		
	%	2.0	2.9	32.4	44.3	18.5	3.74	0.86
Even if I do not understand the teaching process of modern technology, but it does not affect my use	n	12	41	243	236	80		
	%	2.0	6.7	39.7	38.6	13.1	3.54	.87
When I want to use technology to teach, I can immediately think of the content and technology of a certain platform resources	n	10	24	222	251	105		
	%	1.6	3.9	36.3	41.0	17.2	3.68	.86
Overall							3.65	.69
								Agree

The latent variable of facilitating conditions was measured through three observed variables: perceived behavioral control, facilitating conditions, and system compatibility.

In the case of China, the highest-rated item for perceived behavioral control was “I have mastered the knowledge and skills to use platform resources,” with a mean of 3.72, followed by “I have the necessary knowledge to use platform systems” (mean = 3.69). This dimension had an overall mean of 3.66 and a standard deviation of 0.88.

For facilitating conditions, the statement “It is necessary to guide me specifically on the use of digital platform resources” received the highest rating (mean = 3.73), followed by “I can get support from a specific person/group when I face difficulties with platform resources” (mean = 3.64). The overall mean for facilitating conditions was 3.63 (SD = 0.81).

Regarding system compatibility, the item “The resource content of the education platform is compatible with my research field” was rated highest (mean = 3.74). The dimension yielded an overall mean of 3.66 with a standard deviation of 0.76.

The composite mean for the facilitating conditions construct was 3.65, with a standard deviation of 0.69.

Hedonic Motivation

In the respondents' reviews for the hedonic motivation latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.6 Hedonic Motivation Respondents Opinion

Hedonic Motivation	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
User Attention						3.59	1.02	Agree	
Using platform resources to conduct teaching makes students more focused on class.	n	28	69	156	178	181	3.68	1.15	Agree
	%	4.6	11.3	25.5	29.1	29.6			
Using platform resources to develop teaching enables students to better complete their learning tasks.	n	32	94	125	214	147	3.57	1.16	Agree
	%	5.2	15.4	20.4	35.0	24.0			
Using platform to give students learning freedom.	n	43	77	144	205	143	3.54	1.18	Agree
	%	7.0	12.6	23.5	33.5	23.4			
Using platform to make students communicate ideas regularly using platform.	n	42	82	138	190	160	3.56	1.20	Agree
	%	6.9	13.4	22.5	31.0	26.1			
User curiosity						3.65	.96	Agree	
Using platform to carry out teaching has made me more curious to explore the knowledge of various disciplines.	n	50	62	144	181	175	3.60	1.23	Agree
	%	8.2	10.1	23.5	29.6	28.6			

Hedonic Motivation	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
Using platform to conduct teaching enables students to answer questions more actively.	n	14	69	194	176	159	3.65	1.05	Agree
	%	2.3	11.3	31.7	28.8	26.0			
Using platform to develop teaching can activate the classroom atmosphere.	n	21	96	92	225	178	3.72	1.14	Agree
	%	3.4	15.7	15.0	36.8	29.1			
Using platform make students easier to share knowledge.	n	20	121	112	172	36	3.63	1.20	Agree
	%	3.3	19.8	18.3	28.1	28.1			
User Enjoyment							3.68	1.10	Agree
It is interesting to use platform for teaching.	n	15	99	116	176	206	3.75	1.15	Agree
	%	2.5	16.2	19.0	28.8	33.7			
Using platform is enjoyable.	n	56	84	98	196	178	3.58	1.29	Agree
	%	9.2	13.7	16.0	32.0	29.1			
I am very satisfied with the use of platform for teaching.	n	42	94	93	162	221	3.70	1.29	Agree
	%	6.9	15.4	15.2	26.5	36.1			
Overall							3.63	.86	Agree

The latent variable of hedonic motivation was assessed using three observed variables: user attention, user curiosity, and user enjoyment.

Within the Chinese context, the highest-rated item for user attention was “Using platform resources to conduct teaching makes students more focused in class,” with a mean score of 3.68. This subconstruct exhibited an overall mean of 3.59 and a standard deviation of 1.02.

For user curiosity, the statement “Using the platform to develop teaching can activate the classroom atmosphere” received the highest rating, with a mean of 3.72. The dimension had

an overall mean of 3.65 and a standard deviation of 0.96.

Regarding user enjoyment, the item “It is interesting to use the platform for teaching” was rated highest, achieving a mean of 3.75. The subscale yielded an overall mean of 3.68 with a standard deviation of 1.10.

The composite hedonic motivation construct demonstrated a mean of 3.63 and a standard deviation of 0.86.

Intention To Use

In the respondents’ reviews for the intention to use latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.7 Intention To Use Respondents Opinion

Intention to use	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
Intention to use						3.58	.92	Agree	
I intent to use platform immediately.	n	32	56	173	241	110	3.56	1.05	Agree
	%	5.2	9.2	28.3	39.4	18.0			
I look forward to popularizing the use of platform.	n	50	36	176	197	153	3.60	1.16	Agree
	%	8.2	5.9	28.8	32.2	25.0			
I intend to use platform in the future learning sessions.	n	17	71	186	222	116	3.57	1.01	Agree
	%	2.8	11.6	30.4	36.3	19.0			
I would recommend others and my colleagues to use the platform in their teaching.	n	39	32	188	251	102	3.56	1.03	Agree
	%	6.4	5.2	30.7	41.0	16.7			
If the resources of platforms become more diversified in the future, I plan to use it often in the future.	n	47	70	106	237	152	3.62	1.19	Agree
	%	7.7	11.4	17.3	38.7	24.8			
Prediction to use						3.54	.92	Agree	

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Intention to use	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
I predict I will use platform in the future.	n	43	38	219	184	128	3.52	1.10	Agree
	%	7.0	6.2	35.8	30.1	20.9			
I predict I would use platform.	n	44	34	215	186	133	3.54	1.11	Agree
	%	7.2	5.6	35.1	30.4	21.7			
If the resources of platforms become more diversified in the future, I predict that I will use them more often in the future.	n	39	30	235	157	151	3.57	1.10	Agree
	%	6.4	4.9	38.4	25.7	24.7			
Planning to use							3.71	.94	Agree
I plan to use platform in the future.	n	70	51	152	172	167	3.51	1.28	Agree
	%	11.4	8.3	24.8	28.1	27.3			
I plan to use platform in future learning sessions.	n	24	28	170	198	192	3.83	1.05	Agree
	%	3.9	4.6	27.8	32.4	31.4			
I plan to continue to use the platform for various purposes in the future.	n	6	54	174	208	170	3.79	.98	Agree
	%	1.0	8.8	28.4	34.0	27.8			
Overall							3.61	.79	Agree

The latent variable of intention to use was measured through three observed variables: intention to use, prediction to use, and planning to use.

In the Chinese context, the highest-rated item under intention to use was “If the resources of platforms become more diversified in the future, I plan to use them often,” with a mean score of 3.62. This subconstruct exhibited an overall mean of 3.58 and a standard deviation of 0.92.

For prediction to use, the statement “If the resources of platforms become more diversified in the future, I predict that I will use them more often” received the highest rating

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(mean = 3.57). The dimension demonstrated an overall mean of 3.54 with a standard deviation of 0.92.

Regarding planning to use, the item “I plan to use the platform in future learning sessions” was rated highest, achieving a mean of 3.83. The subscale yielded an overall mean of 3.71 and a standard deviation of 0.94.

The composite intention to use construct attained a mean of 3.61 and a standard deviation of 0.79.

Behavior To Use

In the respondents’ reviews for the behavior to use latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.8 Behavior To Use Respondents Opinion

Behavior to use	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
Using experience						3.44	.99	Agree	
I must use the platform for learning and teaching.	n	54	55	180	200	123	3.46	1.17	Agree
	%	8.8	9.0	29.4	32.7	20.1			
I have a lot of experience in using the platform.	n	47	44	234	189	98	3.40	1.08	Agree
	%	7.7	7.2	38.2	30.9	16.0			
I use the platform, which has become a habit.	n	44	47	221	181	119	3.46	1.11	Agree
	%	7.2	7.7	36.1	29.6	19.4			
Using reaction						3.63	.91	Agree	
I am willing to recommend a platform that is worth to my friends on the on my favourite platform.	n	30	40	205	239	98	3.55	1.00	Agree
	%	4.9	6.5	33.5	39.1	16.0			
I plan to continue to use the platform frequently.	n	51	31	179	208	143	3.59	1.15	Agree
	%	8.3	5.1	29.2	34.0	23.4			

Behavior to use	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
I will continue to use the platform.	n	29	8	210	209	156	3.74	1.01	Agree
	%	4.7	1.3	34.3	34.2	25.5			
Overall						3.54	.83	Agree	

The latent variable of behavior to use was assessed using two observed variables: usage experience and usage reaction.

Within the Chinese context, the highest-rated item for usage experience was “I must use the platform for learning and teaching” and “Using the platform has become a habit,” both with a mean score of 3.46. This dimension exhibited an overall mean of 3.44 and a standard deviation of 0.99.

For usage reaction, the statement “I will continue to use the platform” received the highest rating, with a mean of 3.74. The subconstruct demonstrated an overall mean of 3.63 and a standard deviation of 0.91.

The composite behavior to use construct yielded an overall mean of 3.44 and a standard deviation of 0.99.

Teacher Innovativeness

In the respondents’ reviews for the teacher innovativeness latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.9 Teacher Innovativeness Respondents Opinion

Teacher Innovativeness	Opinion Level					Mean	Std. Dev.	Level
	1	2	3	4	5			

Opinion Level									
Teacher Innovativeness									
		1	2	3	4	5	Mean	Std. Dev.	Level
Innate Innovativeness							3.62	.90	Agree
I am more interested in using the new technologies and new products of platform.	n	8	39	172	232	161	3.82	0.94	Agree
	%	1.3	6.4	28.1	37.9	26.3			
I like to use platform for new technologies and new products.	n	38	50	214	201	109	3.48	1.07	Agree
	%	6.2	8.2	35.0	32.8	17.8			
I'm excited to use new technologies and products from platforms.	n	32	28	206	225	121	3.61	1.02	Agree
	%	5.2	4.6	33.7	36.8	19.8			
I have good study habits and time management using platform.	n	36	55	156	224	141	3.62	1.11	Agree
	%	5.9	9.0	25.5	36.6	23.0			
I have a great sense of personal responsibility for using platform.	n	41	60	170	169	172	3.61	1.18	Agree
	%	6.7	9.8	27.8	27.6	28.1			
I show initiative and judgment in carrying out my learning activities when using platform.	n	26	88	151	212	135	3.56	1.11	Agree
	%	4.2	14.4	24.7	34.6	22.1			
Domain Specific Innovativeness							3.55	1.00	Agree
Anyway, I really like to accept new things.	n	40	59	177	198	138	3.55	1.13	Agree
	%	6.5	9.6	28.9	32.4	22.5			
About platform, I know more about the latest education and teaching technology platform resources than others.	n	45	40	202	180	145	3.56	1.14	Agree
	%	7.4	6.5	33.0	29.4	23.7			
When I listen to the latest technical	n	25	105	124	228	130	3.54	1.12	Agree

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Opinion Level							
Teacher Innovativeness	1	2	3	4	5	Std.	
	Frequency(n)&Percentages(%)					Mean	Dev. Level
resources in education, I will be the first to learn more information.	%	4.1	17.2	20.3	37.3	21.2	
Overall						3.60	.84 Agree

The latent variable of teacher innovativeness was assessed through two observed variables: innate innovativeness and domain-specific innovativeness.

In the Chinese context, the highest-rated item within innate innovativeness was “I am more interested in using new technologies and new products of the platform,” with a mean score of 3.82. This dimension exhibited an overall mean of 3.62 and a standard deviation of 0.90.

For domain-specific innovativeness, the statement “Regarding the platform, I know more about the latest educational and teaching technology resources than others” received the highest rating, achieving a mean of 3.56. The subconstruct demonstrated an overall mean of 3.55 with a standard deviation of 1.00.

The composite teacher innovativeness construct yielded an overall mean of 3.60 and a standard deviation of 0.84.

Perceived Trust

In the respondents’ reviews for the perceived trust latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.10 Perceived Trust Respondents Opinion

Opinion Level							
Perceived Trust	1	2	3	4	5	Std.	
	Frequency(n)&Percentages(%)					Mean	Dev. Level

Perceived Trust	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
System Quality						3.68	.96	Agree	
Now the platform start speed, running speed is very fast.	n	10	62	192	77	271	3.88	1.14	Agree
	%	1.6	10.1	31.4	12.6	44.3			
The operation of the current platform is very smooth.	n	3	50	227	204	128	3.66	.91	Agree
	%	0.5	8.2	37.1	33.3	20.9			
Now the platform registration and login is very convenient.	n	22	67	139	84	300	3.94	1.22	Agree
	%	3.6	10.9	22.7	13.7	49.0			
Now the platform downloads smoothly, no flash back, no response error.	n	14	86	112	259	141	3.70	1.04	Agree
	%	2.3	14.1	18.3	42.3	23.0			
In general, the system experience of platform is very good.	n	84	94	109	237	88	3.25	1.27	Agree
	%	13.7	15.4	17.8	38.7	14.4			
Relationship Quality						3.55	1.04	Agree	
I can ask teachers' questions and get answers in time on the platform currently used.	n	31	99	115	212	155	3.59	1.17	Agree
	%	5.1	16.2	18.8	34.6	25.3			
I can exchange my learning experience with my classmates on the platform currently used.	n	54	88	129	192	149	3.48	1.25	Agree
	%	8.8	14.4	21.1	31.4	24.3			
On the platform currently in use, I think I am very familiar with my classmates.	n	42	73	152	187	158	3.57	1.19	Agree
	%	6.9	11.9	24.8	30.6	25.8			
Service quality						3.71	.95	Agree	
I think the platform content and information is reasonably priced.	n	48	64	122	197	181	3.65	1.22	Agree
	%	7.8	10.5	19.9	32.2	29.6			

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Perceived Trust	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
Compared with the time and energy I need to invest, I still think the use of platform is very valuable.	n	16	63	191	193	149	3.65	1.04	Agree
	%	2.6	10.3	31.2	31.5	24.3			
Overall, I am very satisfied with and trust the platform.	n	9	76	110	232	185	3.83	1.04	Agree
	%	1.5	12.4	18.0	37.9	30.2			
Overall							3.65	.83	Agree

The latent variable of perceived trust was evaluated using three observed variables: system quality, relationship quality, and service quality.

Within the Chinese context, the highest-rated indicator for system quality was “Currently, platform registration and login are very convenient,” with a mean score of 3.94. This dimension exhibited an overall mean of 3.68 and a standard deviation of 0.96.

For relationship quality, the statement “I can ask questions and receive timely answers from teachers on the current platform” received the highest rating (mean = 3.59). The subconstruct demonstrated an overall mean of 3.55 with a standard deviation of 1.04.

Regarding service quality, the item “Overall, I am very satisfied with and trust the platform” was rated highest, achieving a mean of 3.83. This dimension yielded an overall mean of 3.71 and a standard deviation of 0.95.

The composite perceived trust construct attained an overall mean of 3.65 and a standard deviation of 0.83.

TPACK Ability

In the respondents’ reviews for the TPACK Ability latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.11 TPACK Ability Respondents Opinion

TPACK Ability	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
Technological Pedagogical knowledge									
						3.63	1.01	Agree	
I was able to use platform student assessments to adjust the teaching.	n	42	75	99	183	213	3.74	1.24	Agree
	%	6.9	12.3	16.2	29.9	34.8			
I was able to use platform resource to create valid content statements out of the textbook.	n	30	22	190	218	152	3.72	1.03	Agree
	%	4.9	3.6	31.0	35.6	24.8			
My ability can meet the overall needs of contemporary platform resource teaching.	n	50	50	225	155	132	3.44	1.15	Agree
	%	8.2	8.2	36.8	25.3	21.6			
Technological Content knowledge									
						3.62	.86	Agree	
I was able to use platform resource to predict the student's skills or understanding of a particular topic.	n	36	53	161	244	118	3.58	1.08	Agree
	%	5.9	8.7	26.3	39.9	19.3			
I was able to build an platform resource learning environment that helped students build new knowledge and technology.	n	40	38	196	231	107	3.53	1.06	Agree
	%	6.5	6.2	32.0	37.7	17.5			
I can use platform resource to improve the degree of students' knowledge (for example, preview the online courseware content in advance, etc.).	n	5	34	196	245	132	3.76	.88	Agree
	%	0.8	5.6	32.0	40.0	21.6			

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TPACK Ability	Opinion Level					Mean	Std. Dev.	Level	
	1	2	3	4	5				
Technological Pedagogical Content knowledge						3.72	.79	Agree	
I can select platform resource to use in my classroom that enhance what I teach, how I teach, and what students learn.	n	8	80	191	203	130	3.60	1.00	Agree
	%	1.3	13.1	31.2	33.2	21.2			
I can teach lessons that appropriately combine my teaching subject, technologies, and teaching approaches.	n	8	26	179	265	134	3.80	.87	Agree
	%	1.3	4.2	29.2	43.3	21.9			
I can provide leadership in helping others to coordinate the use of content, technologies, and teaching approaches at my school and/or district.	n	8	43	166	272	123	3.75	.90	Agree
	%	1.3	7.0	27.1	44.4	20.1			
Overall							3.66	.74	Agree

The latent variable of TPACK ability was assessed through three observed variables: technological pedagogical knowledge, technological content knowledge, and technological pedagogical content knowledge.

In the Chinese context, the highest-rated indicator for technological pedagogical knowledge was “I am able to use platform student assessments to adjust my teaching,” with a mean score of 3.74. This dimension exhibited an overall mean of 3.63 and a standard deviation of 1.01.

For technological content knowledge, the statement “I can use platform resources to enhance students' knowledge acquisition (e.g., by previewing online courseware content in

advance)” received the highest rating, achieving a mean of 3.76. The subconstruct demonstrated an overall mean of 3.62 with a standard deviation of 0.86.

Regarding technological pedagogical content knowledge, the item “I can deliver lessons that effectively integrate my subject matter, technologies, and teaching methods” was rated highest, with a mean of 3.80. This dimension yielded an overall mean of 3.72 and a standard deviation of 0.79.

The composite TPACK ability construct attained an overall mean of 3.66 and a standard deviation of 0.74.

Culture

In the respondents’ reviews for the culture latent variable, a 5-point Likert Scale was applied, where 1 = strongly disagree, 2=Disagree, 3 = neutral, 4=Agree, 5strongly Agree.

Table 4.12 Culture Respondents Opinion

Culture	Opinion Level					Mean	Std. Dev.	Level
	1	2	3	4	5			
Frequency(n)&Percentages(%)								
Individualism/Collectivism						3.58	.90	Agree
I get better learning results when I study as a platform group member than when I study independently on my own.	n	28	38	273	177	96		
	%	4.6	6.2	44.6	28.9	15.7	3.45	.98
When group uses the platform, I am willing to abandon some personal interests to get benefits.	n	38	48	24139.	155	130	3.48	1.10
	%	6.2	7.8	4	25.3	21.2		
When group uses the platform, I am willing to	n	9	44	17027.	209	180	3.83	.98
	%	1.5	7.2	8	34.2	29.4		

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Culture	Opinion Level					Mean	Std. Dev.	Level
	1	2	3	4	5			
Frequency(n)&Percentages(%)								
abandon some personal target to get the goal.								
Uncertainty Avoidance						3.65	.91	Agree
Studying platform, rules, and regulations are important because they inform me what is expected of me.	n	8	80	136	175	213		
	%	1.3	13.1	22.2	28.6	34.8	3.83	1.09
Studying the order and structure of platform learning modules important.	n	42	45	167	215	143		
	%	6.9	7.4	27.3	35.1	23.4	3.61	1.13
It is important to follow platform instructions and procedures closely.	n	16	90	170	222	114		
	%	2.6	14.70	27.819	36.323	18.6116	3.54	1.04
Standardized work procedures are helpful when studying with platform.	n	5	64	2	5	19.0		
	%	0.8	10.5	31.4	38.4		3.64	.93
							3.62	.80
								Agree

The latent variable of culture was evaluated using two observed variables: individualism/collectivism and uncertainty avoidance.

In the Chinese context, the highest-rated indicator within the individualism/collectivism dimension was the statement, "When the group uses the platform, I am willing to forgo some personal objectives to achieve collective goals," which received a mean score of 3.83. This subconstruct yielded an overall mean of 3.58 with a standard deviation of 0.90.

Regarding uncertainty avoidance, the item "Studying platform rules and regulations is important because they clarify what is expected of me" obtained the highest mean score of

3.83. The subscale showed an overall mean of 3.65 and a standard deviation of 0.91.

The composite culture construct achieved an overall mean of 3.62 with a standard deviation of 0.80.

4.2.3 Test for Normality and Correlation Analysis

This section presents the results of the normality tests, evaluated using the skewness and kurtosis criteria, and the correlation analysis of the variables.

Test for Normality

This section examines the normality of the latent variables' distributions. Eleven latent constructs were assessed, each operationalized through multiple observed indicators: performance expectation (measured by five indicators: perceived usefulness, relative advantage, extrinsic motivation, job-fit, and outcome expectations); effort expectation (evaluated through two indicators: perceived ease of use and ease of use); social influence (comprising two indicators: general social influence and peer social influence); facilitating conditions (represented by three indicators: perceived behavioral control, facilitating conditions, and system compatibility with individuals); hedonic motivation (assessed via three indicators: user attention, user curiosity, and user enjoyment); intention to use (measured by three indicators: intention to use, prediction to use, and planning to use); behavior to use (captured through two indicators: usage experience and usage reaction); teacher innovativeness (evaluated using two indicators: innate innovativeness and domain-specific innovativeness); perceived trust (reflected by three indicators: system quality, relationship quality, and service quality); TPACK ability (measured through three indicators: technological pedagogical knowledge, technological content knowledge, and technological pedagogical content knowledge); and culture (assessed via two indicators: uncertainty avoidance and individualism/collectivism).

The average skewness and kurtosis values for the observed indicators corresponding to each latent variable are summarized in the table below, while comprehensive results are provided in Appendix D.

Table 4.13 Test for Normality

	Skewness	Kurtosis	Normal Distribution
Performance Expectation	-0.204	-1.029	√
Efforts Expectation	-0.223	-0.855	√
Social Influence	-0.174	-0.912	√
Facilitating Conditions	-0.168	-0.904	√
Hedonic Motivation	-0.287	-1.046	√
Intention To Use	-0.291	-0.942	√
Behavior To Use	-0.273	-0.757	√
Teacher Innovativeness	-0.210	-0.972	√
Perceived Trust	-0.308	-1.021	√
TPACK Ability	-0.246	-0.999	√
Culture	-0.254	-0.865	√

Correlation Analysis

Correlation analysis was conducted to examine the relationships among the observed variables corresponding to the 11 latent constructs within the Chinese context. As illustrated in the following figure, the correlation coefficients for each set of indicators were as follows: performance expectancy ranged from 0.51 to 0.55; effort expectancy was 0.54; social influence measured 0.56; facilitating conditions varied between 0.50 and 0.55; hedonic motivation spanned 0.56 to 0.59; intention to use fell within 0.52 to 0.55; behavior to use was 0.52; teacher innovativeness recorded 0.57; perceived trust ranged from 0.55 to 0.58; TPACK ability varied between 0.54 and 0.55; and culture exhibited a coefficient of 0.57.

These results indicate satisfactory correlation among the variables, as all coefficients exceeded the minimum threshold of 0.3, supporting their suitability for structural equation modeling (SEM). Furthermore, the absence of coefficients above 0.8 confirms that multicollinearity is not a concern in the dataset.

	PU	RA	EM	JF	OE	PFU	POU	GSI	PSI	PBC	FF	SCI	UA	DC	UF	ITU	PTU	PLTU	URX	UR	II	DSI	SQ	SRQ	RQ	TPK	TCK	TPCK	UAA	IC			
PU	1.00																																
RA	0.55	1.00																															
EM	0.57	0.52	1.00																														
JF	0.54	0.58	0.56	1.00																													
OE	0.55	0.51	0.55	0.51	1.00																												
PFU	0.16	0.19	0.17	0.13	0.16	1.00																											
POU	0.12	0.11	0.14	0.12	0.14	0.54	1.00																										
GSI	0.11	0.10	0.08	0.10	0.12	0.16	0.12	1.00																									
PSI	0.07	0.10	0.09	0.10	0.09	0.12	0.11	0.55	1.00																								
PBC	0.09	0.02	0.02	0.01	0.02	0.00	0.01	0.00	0.50	1.00																							
FF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00																						
SCI	0.64	0.53	0.55	0.52	0.59	0.00	0.00	0.00	0.00	0.00	0.00	1.00																					
UA	0.11	0.12	0.09	0.12	0.14	0.19	0.12	0.19	0.16	0.19	0.55	1.00																					
DC	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00																				
UF	0.13	0.15	0.16	0.12	0.15	0.23	0.09	0.16	0.18	0.10	0.14	0.17	1.00																				
ITU	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.00	1.00																			
PTU	0.13	0.13	0.13	0.10	0.16	0.14	0.06	0.17	0.15	0.19	0.27	0.19	0.55	1.00																			
PLTU	0.00	0.00	0.00	0.02	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00																		
URX	0.11	0.14	0.13	0.09	0.11	0.13	0.10	0.10	0.10	0.10	0.12	0.11	0.59	0.56	1.00																		
UR	0.01	0.00	0.00	0.02	0.01	0.00	0.01	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.00	1.00																	
II	0.28	0.25	0.24	0.27	0.23	0.27	0.27	0.29	0.21	0.24	0.23	0.26	0.28	0.29	0.24	1.00																	
DSI	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00																
SQ	0.15	0.22	0.23	0.18	0.20	0.26	0.22	0.19	0.17	0.25	0.24	0.23	0.26	0.27	0.17	0.58	1.00																
SRQ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00															
RQ	0.23	0.24	0.24	0.19	0.26	0.28	0.22	0.17	0.19	0.22	0.23	0.27	0.27	0.29	0.24	0.52	0.55	1.00															
TPK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00														
TCK	0.22	0.20	0.20	0.19	0.15	0.13	0.07	0.21	0.22	0.30	0.24	0.23	0.13	0.15	0.15	0.42	0.37	0.43	1.00														
TPCK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00													
UAA	0.14	0.15	0.16	0.11	0.15	0.20	0.19	0.15	0.15	0.29	0.22	0.26	0.17	0.15	0.17	0.39	0.39	0.42	0.52	1.00													
IC	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00												

Figure 4.1 Correlation Analysis CFA

4.2.4 Measurement of the Model for China

The measurement of the model was implemented using the Confirmatory factor analysis and the validity and reliability analysis.

First Order CFA Model

CFA Analysis-Performance Expectation Variable

The initial confirmatory factor analysis (CFA) model assessed the validity of the five observed variables measuring performance expectation: Perceived Usefulness (PU), Relative Advantage (RA), Extrinsic Motivation (EM), Job-fit (JF), and Outcome Expectations (OE). As shown in the following figure, the model demonstrated exact fit with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model. The goodness-of-fit indices were ideal: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

Regarding factor loadings, all were statistically significant at the 0.05 level. EM and PU This material is reserved for educational use only, not allowed for commercial use.

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exhibited the highest loadings at 0.76 each, followed by JF and OE at 0.73 each, and RA at 0.72.

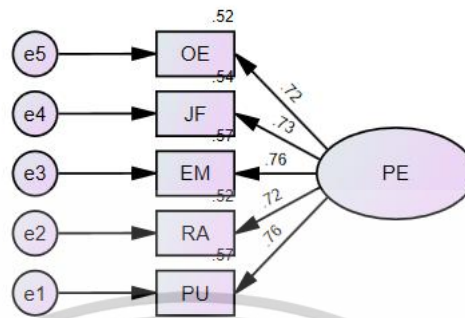


Figure 4.2 CFA Analysis - Performance Expectation Variable

CFA Analysis-Effort Expectation Variable

The second confirmatory factor analysis (CFA) model evaluated the validity of the two observed variables for effort expectation: Perceived Ease of Use (PEU) and Ease of Use (EOU). As indicated in the following figure, the model exhibited exact fit with a chi-square value of 0 and 0 degrees of freedom, consistent with a just-identified model. Goodness-of-fit indices were optimal: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. PEU demonstrated a loading of 0.74, while EOU showed a loading of 0.72.

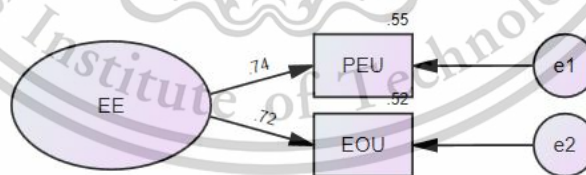


Figure 4.3 CFA Analysis - Effort Expectation Variable

CFA Analysis-Social Influence Variable

The third confirmatory factor analysis (CFA) model assessed the validity of the two observed variables representing social influence: General Social Influence (GSI) and Peer Social Influence (PSI). As shown in the following figure, the model demonstrated exact fit with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model.

Goodness-of-fit indices reached ideal values: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. PSI exhibited a loading of 0.75, while GSI showed a loading of 0.74.

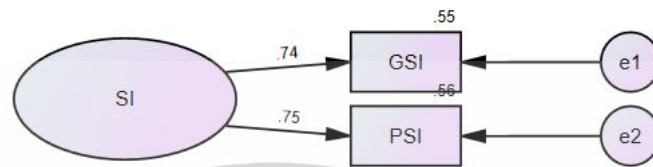


Figure 4.4 CFA Analysis - Social Influence Variable

CFA Analysis-Facilitating Condition Variable

The fourth confirmatory factor analysis (CFA) model evaluated the validity of the three observed variables for facilitating conditions: Perceived Behavioral Control (PBC), Facilitating Conditions (FC), and System Compatibility with Individuals (SCI). As displayed in the following figure, the model demonstrated exact fit with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model. Goodness-of-fit indices were optimal: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. FC exhibited the highest loading at 0.78, while both PBC and SCI demonstrated loadings of 0.71.

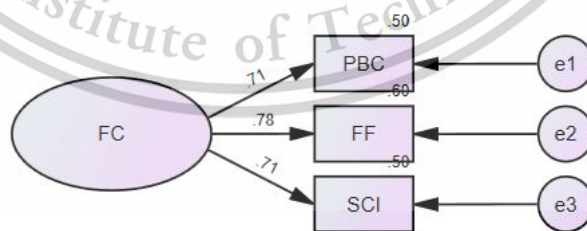


Figure 4.5 CFA Analysis - Facilitating Condition Variable

CFA Analysis-Hedonic Motivation Variable

The fifth confirmatory factor analysis (CFA) model assessed the validity of the three observed variables measuring hedonic motivation: User Attention (UA), User Curiosity (UC),

and User Enjoyment (UE). As shown in the corresponding figure, the model exhibited an exact fit, with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model. Goodness-of-fit indices were optimal: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. UA demonstrated the highest loading at 0.78, followed by UE at 0.75, and UC at 0.74.

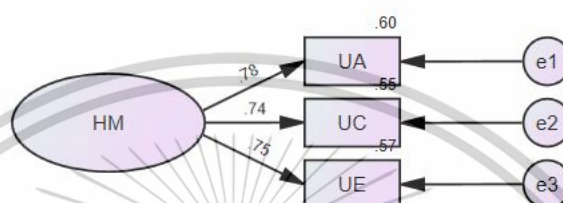


Figure 4.6 CFA Analysis - Hedonic Motivation Variable

CFA Analysis-Teacher Innovativeness Variable

The sixth confirmatory factor analysis (CFA) model assessed the validity of the two observed variables representing teacher innovativeness: Innate Innovativeness (II) and Domain-Specific Innovativeness (DSI). As shown in the corresponding figure, the model demonstrated exact fit with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model. Goodness-of-fit indices reached ideal values: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. II exhibited a loading of 0.79, while DSI showed a loading of 0.72.

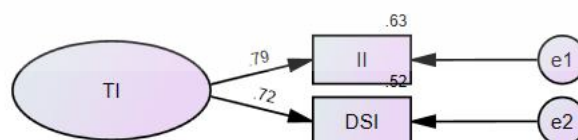


Figure 4.7 CFA Analysis - Teacher Innovativeness Variable

CFA Analysis-Perceived Trust Variable

The seventh confirmatory factor analysis (CFA) model was employed to assess the

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validity of the three observed variables constituting perceived trust: System Quality (SQ), Relationship Quality (RQ), and Service Quality (SEQ). As illustrated in the accompanying figure, the model demonstrated an exact fit, evidenced by a chi-square value of 0 with 0 degrees of freedom, consistent with a just-identified specification. All goodness-of-fit indices attained ideal values: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All standardized factor loadings were statistically significant at the 0.05 level. Both SQ and RQ yielded loadings of 0.76, while SEQ exhibited a loading of 0.73.

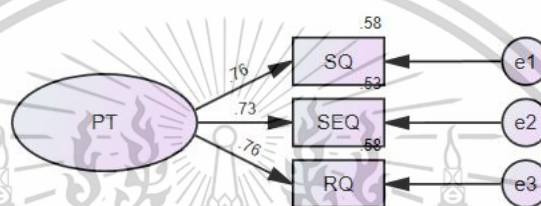


Figure 4.8. CFA Analysis - Perceived Trust Variable

CFA Analysis-TPACK Ability Variable

The seventh confirmatory factor analysis (CFA) model assessed the validity of the three observed variables measuring TPACK ability: Technological Pedagogical Knowledge (TPK), Technological Content Knowledge (TCK), and Technological Pedagogical Content Knowledge (TPCK). As shown in Figure 4.9, the model demonstrated exact fit with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model. Goodness-of-fit indices reached optimal values: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. TPCK exhibited the highest loading at 0.75, followed by TPK at 0.74, and TCK at 0.73.

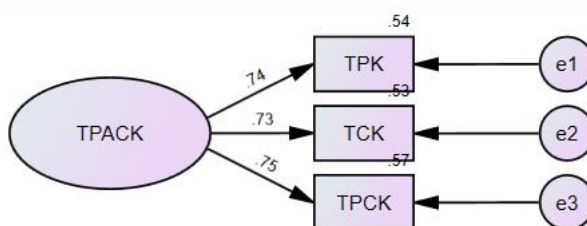


Figure 4.9 CFA Analysis - TPACK Ability Variable

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CFA Analysis-Intention To Us Variable

The ninth confirmatory factor analysis (CFA) model evaluated the validity of the three observed variables measuring intention to use: Intention to Use (ITU), Prediction to Use (PTU), and Planning to Use (PLTU). As shown in Figure 4.9, the model demonstrated exact fit with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model. Goodness-of-fit indices reached optimal values: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. PTU exhibited the highest loading at 0.75, followed by PLTU at 0.73, and ITU at 0.71.

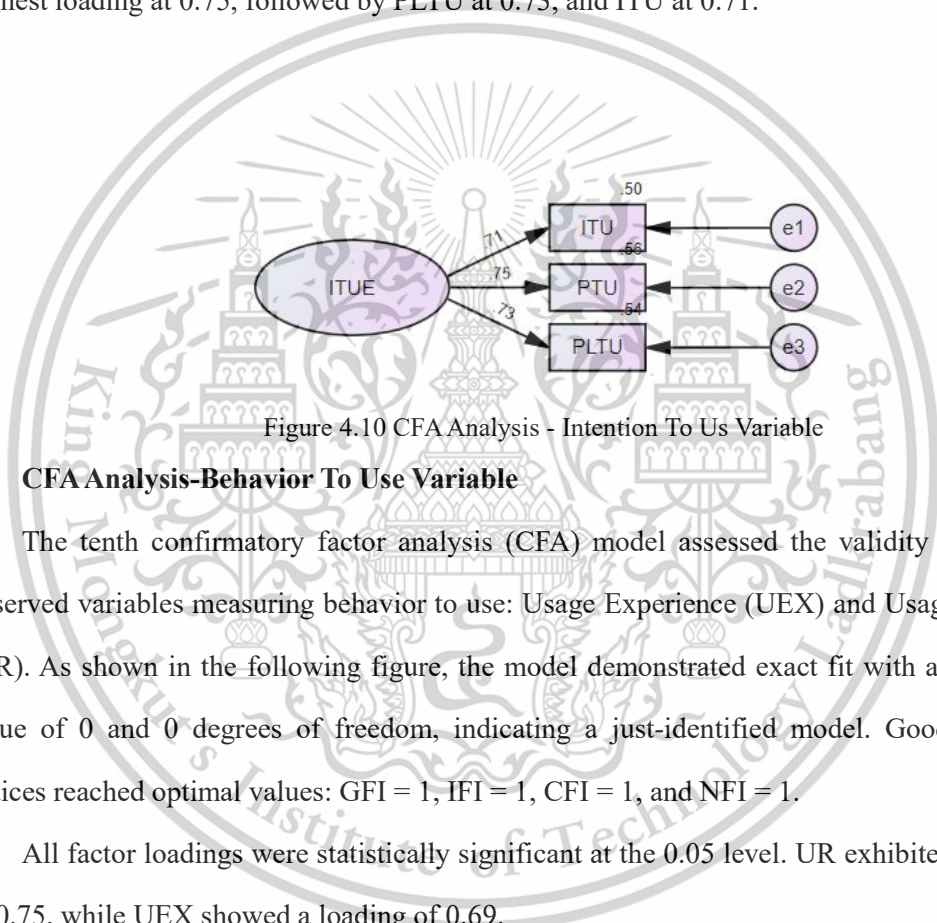


Figure 4.10 CFA Analysis - Intention To Us Variable

CFA Analysis-Behavior To Use Variable

The tenth confirmatory factor analysis (CFA) model assessed the validity of the two observed variables measuring behavior to use: Usage Experience (UEX) and Usage Reaction (UR). As shown in the following figure, the model demonstrated exact fit with a chi-square value of 0 and 0 degrees of freedom, indicating a just-identified model. Goodness-of-fit indices reached optimal values: GFI = 1, IFI = 1, CFI = 1, and NFI = 1.

All factor loadings were statistically significant at the 0.05 level. UR exhibited a loading of 0.75, while UEX showed a loading of 0.69.

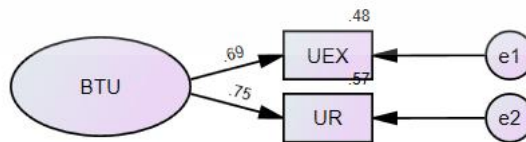


Figure 4.11 CFA Analysis - Behavior To Use Variable

Second Model CFA Analysis

The model fit was assessed using Confirmatory Factor Analysis (CFA) for the ten latent variables. This material is reserved for educational use only, not allowed for commercial use.

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variables included in the study: Performance Expectation (PE), Effort Expectation (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Intention to Use (ITUE), Behavior to Use (BTU), Teacher Innovativeness (TI), Perceived Trust (PT), and TPACK Ability (TPACK). The results of the CFA for the Chinese sample, along with the specified measurement model, are presented below.

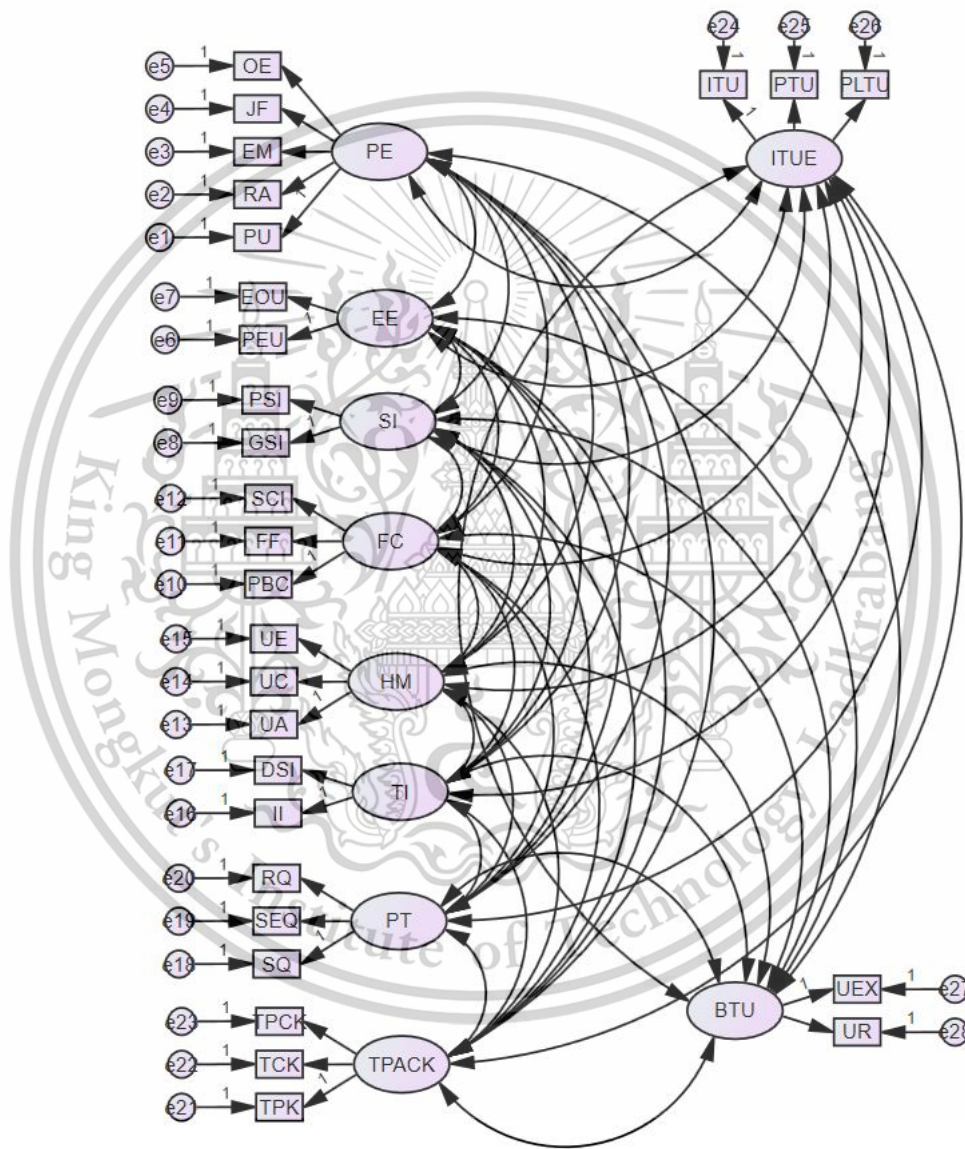


Figure 4.12 Measurement Model of Factors Involving Intention and Behavior to Use

For the case of China, the following figure shows the standardized estimates of the loading and the r-squared values of the indicator variables. The CFA model fitness criteria indicate that the initial model fits well with the data.

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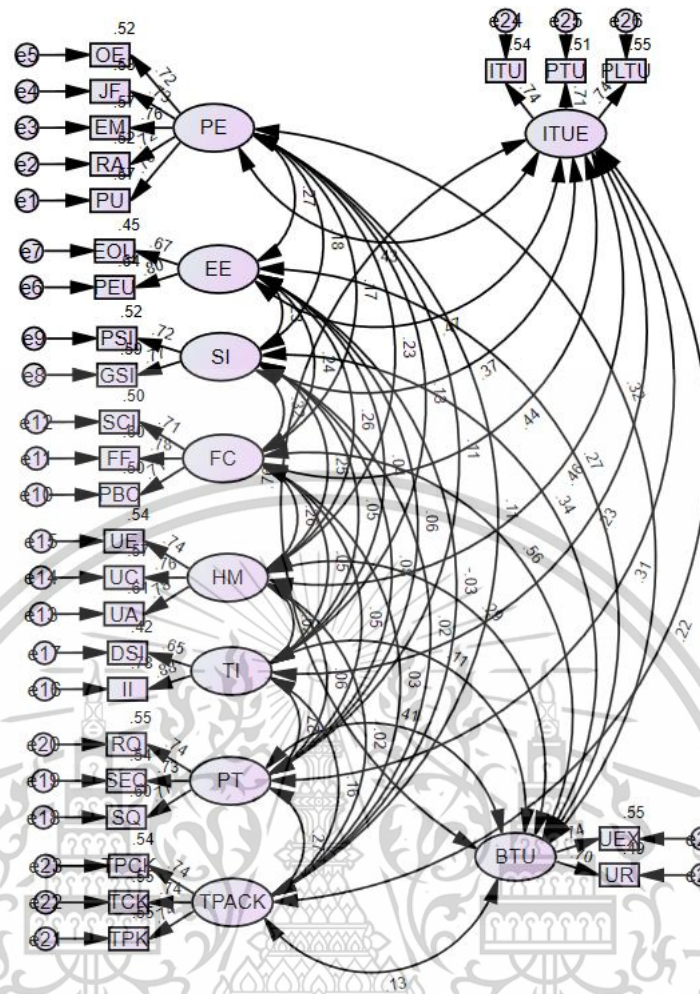


Figure 4.13 CFA for China

For the Chinese sample, the baseline model demonstrated adequate fit to the data. The chi-square statistic was significant ($\chi^2 = 404.974, p < 0.01$), while the more practical fit index, $\chi^2/df = 1.328$, fell within the acceptable range (below 5), though this value may be influenced by sample size (Schumacker & Lomax, 2004);(Hu & Bentler, 1999). The comparative fit indices indicated excellent model fit: CFI = 0.982, TLI = 0.978, and NFI = 0.932, all exceeding the recommended threshold of 0.90. Furthermore, the RMSEA value was 0.023, which is below the cutoff of 0.08 (Browne & Cudeck, 1993); (Schumacker & Lomax, 2004). These results support the feasibility of proceeding to multi-group Structural Equation Modeling (SEM) analysis. A summary of the CFA results is provided in the table below.

Table 4.14 Measurement Model Fit Indices

Indices	Criteria	Statistics Value
---------	----------	------------------

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Indices	Criteria	Statistics Value
CMIN/DF	<5	1.328
GFI	≥ 0.9	0.957
NFI	≥ 0.90	0.932
IFI	≥ 0.90	0.982
CFI	≥ 0.90	0.982
RMR	<0.08	0.027
RMSEA	<0.08	0.023
Conclusion		Model Fit

In addition to model fit evaluation, the factor loadings from the confirmatory factor analysis (CFA) were examined to assess the contributions of observed variables to their respective latent constructs. The table below presents the factor loadings, corresponding t-values, significance indicators, and squared multiple correlation (SMC) values for each indicator.

Regarding the latent variable Performance Expectancy (PE), Perceived Usefulness (PU) exhibited a factor loading of 0.756 and an SMC of 0.571, indicating that it explains approximately 57% of the variance in PE. This was followed by Extrinsic Motivation (EM), with a loading of 0.755 and an SMC of 0.570, also accounting for 57% of the variance. Job-fit (JF) showed a loading of 0.731 and an SMC of 0.535, explaining 54% of the variance. Relative Advantage (RA) and Outcome Expectation (OE) demonstrated loadings of 0.722 and 0.721, with SMCs of 0.521 and 0.520, respectively, each contributing approximately 52% to the variance in PE.

For the latent variable Effort Expectancy (EE), Perceived Ease of Use (PEU) exhibited a factor loading of 0.801 and a squared multiple correlation (SMC) of 0.641, indicating that it explains approximately 64% of the variance in EE. This was followed by Ease of Use (EOU), which demonstrated a loading of 0.669 and an SMC of 0.447, accounting for 45% of the variance.

Regarding the latent construct Social Influence (SI), General Social Influence (GSI)

showed the highest factor loading of 0.769 and an SMC of 0.592, explaining 59% of the variance in SI. Peer Social Influence (PSI) followed with a loading of 0.722 and an SMC of 0.521, contributing 52% to the variance.

For the latent variable Facilitating Conditions (FC), Perceived Behavioral Control (PBC) exhibited the highest factor loading of 0.706 and a squared multiple correlation (SMC) of 0.601, indicating that it explains approximately 60% of the variance in FC. This was followed by System Compatibility with Individuals (SCI), which demonstrated a loading of 0.711 and an SMC of 0.505, accounting for 51% of the variance. Facilitating Conditions (FF) showed a loading of 0.775 and an SMC of 0.498, contributing 50% to the variance.

Regarding the latent construct Hedonic Motivation (HM), User Attention (UA) exhibited the highest factor loading of 0.780 and an SMC of 0.609, explaining 61% of the variance in HM. User Curiosity (UC) followed with a loading of 0.756 and an SMC of 0.571, accounting for 57% of the variance, while User Enjoyment (UE) demonstrated a loading of 0.737 and an SMC of 0.544, contributing 54% to the variance.

For the latent variable Teacher Innovativeness (TI), Innate Innovativeness (II) exhibited the highest factor loading of 0.885 and a squared multiple correlation (SMC) of 0.783, indicating that it explains approximately 78% of the variance in TI. This was followed by Domain-Specific Innovativeness (DSI), which demonstrated a loading of 0.646 and an SMC of 0.417, accounting for 42% of the variance.

Regarding the latent construct Perceived Trust (PT), System Quality (SQ) showed the highest factor loading of 0.775 and an SMC of 0.600, explaining 60% of the variance in PT. Service Quality (SVQ) followed with a loading of 0.742 and an SMC of 0.551, contributing 55% to the variance, while Relationship Quality (RQ) exhibited a loading of 0.733 and an SMC of 0.537, accounting for 54% of the variance.

For the latent variable TPACK Ability (TPACK), Technological Pedagogical Knowledge (TPK) exhibited a factor loading of 0.741 and a squared multiple correlation (SMC) of 0.548, indicating that it explains approximately 55% of the variance in TPACK. This was followed by Technological Content Knowledge (TCK), which demonstrated a loading of 0.740 and an SMC of 0.548, also accounting for 55% of the variance. Technological Pedagogical Content Knowledge (TPCK) showed a loading of 0.735 and an SMC of 0.541, contributing 54% to the

variance.

Regarding the latent construct Intention to Use (ITUE), Planning to Use (PLTU) exhibited the highest factor loading of 0.743 and an SMC of 0.552, explaining 55% of the variance in ITU. Intention to Use (ITU) followed with a loading of 0.735 and an SMC of 0.540, accounting for 54% of the variance, while Prediction to Use (PTU) demonstrated a loading of 0.713 and an SMC of 0.508, contributing 51% to the variance.

For the latent variable Behavior to Use (BTU), Usage Experience (UEX) showed a factor loading of 0.743 and an SMC of 0.552, explaining 55% of the variance in BTU. This was followed by Usage Reaction (UR), which exhibited a loading of 0.701 and an SMC of 0.491, accounting for 49% of the variance.

Table 4.15 CFA Factor Loadings

Latent Variable	Variables		Factor Loading			t	Squared-R
	Observed Variable	Estimate	S.E.	Beta			
PE	PU	1		0.756			0.571
	RA	0.927	0.55	0.722	***		0.521
	EM	1.056	0.59	0.755	***		0.570
	JF	1.055	0.61	0.731	***		0.535
	OE	0.912	0.54	0.721	***		0.520
CR=0.856; AVE=0.543							
EE	PEU	1		0.801			0.641
	EOU	0.864	0.102	0.669	***		0.447
CR=0.704; AVE=0.545							
SI	GSI	1		0.769			0.592
	PSI	0.933	0.119	0.722	***		0.521
CR=0.715; AVE=0.556							
FC	PBC	1		0.706			0.498

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Variables		Factor Loading			t	Squared-R
Latent Variable	Observed Variable	Estimate	S.E.	Beta		
	FF	1.013	0.069	0.775	***	0.601
	SCI	0.863	0.061	0.711	***	0.505
CR=0.775;AVE=0.535						
HM	UAN	1		0.780		0.609
	UC	0.909	0.057	0.756	***	0.571
	UE	1.016	0.064	0.737	***	0.544
CR=0.802;AVE=0.574						
TI	II	1		0.885		0.783
	DSI	0.805	0.132	0.646	***	0.417
CR=0.746;AVE=0.600						
PT	SQ	1		0.775		0.600
	SEQ	1.017	0.066	0.733	***	0.537
	RQ	0.941	0.060	0.742	***	0.551
CR=0.794;AVE=0.563						
TPACK	TPK	1		0.741		0.548
	TCK	0.853	0.059	0.740	***	0.548
	TPCK	0.773	0.054	0.735	***	0.541
CR=0.783;AVE=0.546						
ITUE	ITU	1		0.735		0.540
	PTU	1.027	0.065	0.713	***	0.508
	PLTU	1.038	0.063	0.743	***	0.552
CR=0.776;AVE=0.537						
BTU	UEX	1		0.743		0.552
	UR	0.865	0.062	0.701	***	0.491

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Variables		Factor Loading			t	Squared-R
Latent Variable	Observed Variable	Estimate	S.E.	Beta		
CR= 0.686;AVE=0.522						

4.2.5 Validity and Reliability Analysis

The reliability and validity of the model constructs were assessed in this section. Reliability was evaluated according to the criteria established by (Fornell & Larcker, 1981), which stipulate that the composite reliability (CR) of each construct should be no less than 0.70, indicating that all items consistently measure their respective latent variables (Nunnally & Bernstein, 1994). Additionally, the average variance extracted (AVE) for each construct was required to exceed 0.50 to ensure adequate convergent validity (Segars, 1997). The computed CR and AVE values for the Chinese sample are presented in the table below.

Table 4.16 Validity and Reliability Analysis

Variables	CR	AVE
PE	0.856	0.543
EE	0.704	0.545
SI	0.715	0.556
FC	0.775	0.535
HM	0.802	0.574
ITUE	0.776	0.537
BTU	0.686	0.522
TI	0.746	0.600
PI	0.794	0.563
TPACK	0.783	0.546

As shown in the table above, all composite reliability (CR) values exceed the threshold

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of 0.7, with the exception of Behavior to Use (BTU), which approximates to 0.7 after rounding. The average variance extracted (AVE) values for the Chinese sample range from 0.522 to 0.600. These results indicate that all factor loadings, CR values, and AVE estimates meet the recommended criteria, thereby supporting the convergent validity of the measurement model.

4.2.6 Research result of empirically determining the effects of behavioral intention to use digital education platform in China

Structural Equation Modelling (SEM)

This section was carried out to address the first objective of the study “To empirically determine the effects of behavioral intention to use digital education platform in China” which was addressed by conducting SEM analysis.

Initial Models



Following the confirmation of model fit, a structural equation model was constructed. These initial models served as the foundation for subsequent moderation analysis. This study examined two types of moderating effects: the moderating effects of gender, education, and culture on the relationships between the independent and dependent variables.

Initial SEM Analysis

Overview of Terms

Structural Equation Modeling (SEM) was employed to assess the effects of multiple variables on behavioral intention to use digital education platforms in China. The analysis incorporated both latent and observed variables. The symbols used to denote the variables and their interrelationships are presented in the table below.

Table 4.17 Symbols used in SEM

Symbol	Meaning
	Latent Variable
	Observed Variable

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Table 4.18 Symbols used in SEM

Variables symbol		
Latent Variable	Observed Variable	Variable Names
PE	Performance Expectation	
	PU	perceived usefulness
	RA	relative advantage
	EM	extrinsic motivation
	JF	Job-fit
	OE	outcome expectations
EE	Effort Expectation	
	PEU	perceived ease of use
	EOU	ease of use
SI	Social Influence	
	GSI	general social influence
	PSI	peer social influence
FC	Facilitating Condition	
	PBC	perceived behavioral control
	FF	facilitating factors
	SCI	system compatibility with individuals
HM	Hedonic Motivation	
	UA	user attention
	UC	user curiosity

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Variables symbol		
Latent Variable	Observed Variable	Variable Names
	UE	user enjoyment
TI		Teacher Innovativeness
	II	innate innovativeness
	DSI	domain specific innovativeness
PT		Perceived Trust
	SQ	system quality
	SEQ	relationship quality
	RQ	service quality
TPACK		TPACK ability
	TPK	technological pedagogical knowledge
	TCK	technological content knowledge
	TPCK	technological pedagogical content knowledge
ITUE		Intention To Use
	PTU	prediction to use
	ITU	intention to use
	PLTU	planing to use
BTU		Behavior To Use
	UEX	using experience
	UR	using reaction

Based on the review of the literature and with reference to the developed hypothesis of the study, the following model frame for SEM was developed.

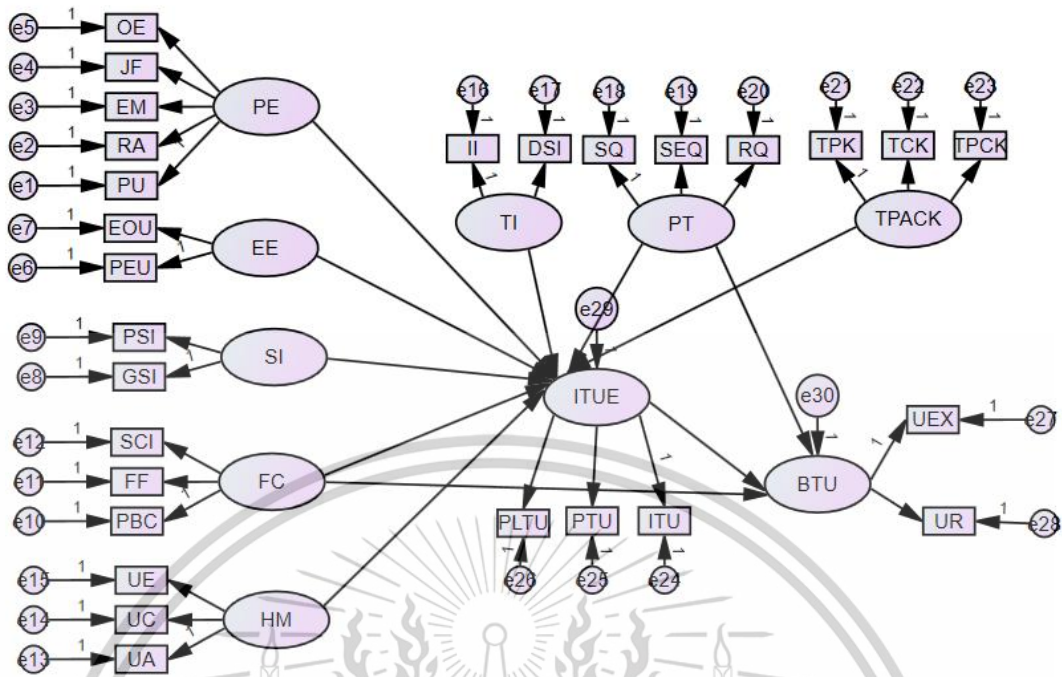


Figure 4.14 Model framework developed for SEM

After the analysis of the SEM model, the following SEM model output was obtained.

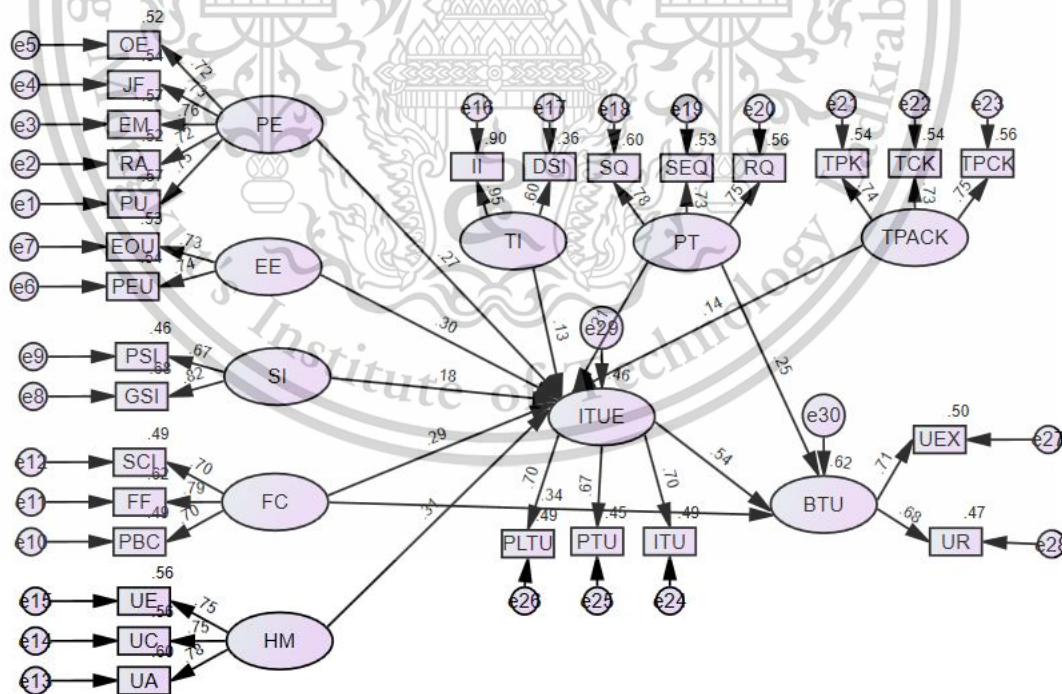


Figure 4.15 Initial SEM Analysis

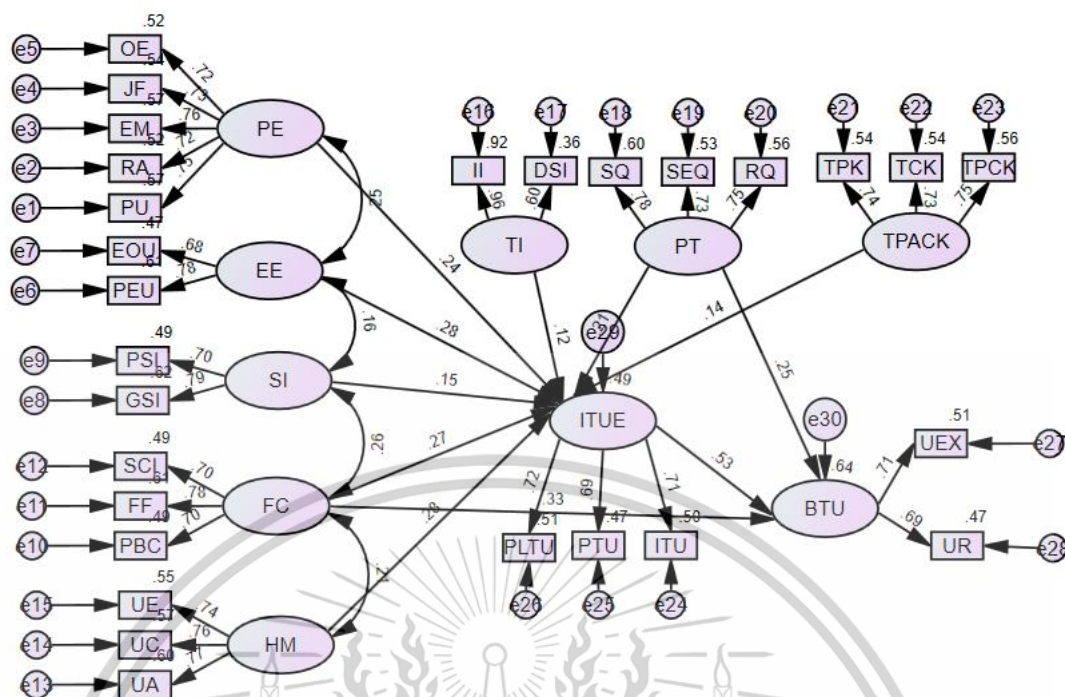


Figure 4.16 Final SEM Analysis

The figure above presents the path analysis results, including standardized factor loadings and R-squared values for the indicator variables. The structural equation model's fit was assessed for the seven latent variables included in the study. For the Chinese sample, the baseline model demonstrated acceptable fit to the data. The chi-square statistic was significant ($\chi^2[335] = 575.800, p < 0.01$), while the more practical fit index, $\chi^2/df = 1.719$, fell below the recommended threshold of 5, though this value may be influenced by sample size (Hu & Bentler, 1999). The comparative fit indices indicated excellent model fit: CFI = 0.957, TLI = 0.951, and GFI = 0.938, all exceeding the conventional cutoff of 0.90. Given that all other indices surpassed 0.9 and the NFI approximated to 0.9 after rounding, the model was deemed satisfactory. Furthermore, the RMSEA value was 0.034, which is below the stringent threshold of 0.05 (Cudeck Browne & Cudeck, 1992).

These results are summarised in the table below.

Indieees	Criteria	Statistics Value
CMIN/DF	<5	1.719
GFI	>0.90	0.938

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Indieces	Criteria	Statistics Value
NFI	>0.90	0.904
IFI	>0.90	0.957
CFI	>0.90	0.957
RMR	<0.08	0.067
RMSEA	<0.08	0.034
Conclusion		Model Fit

The path relationship between the endogenous and exogenous variables is shown in the table below.

Regression Weights

Table 4.19 Path Analysis Regression Weights

Paths	Estimate	S. E.	C. R.	P-value	Significance
Direct Effects					
ITUE<---PE	0.236	0.042	5.104	***	Significance
ITUE<---EE	0.284	0.053	4.939	***	Significance
ITUE<---SI	0.147	0.047	2.791	0.05	Not significance
ITUE<---FC	0.268	0.052	5.215	***	Significance
ITUE<---HM	0.281	0.038	5.892	***	Significance
ITUE<---TI	0.120	0.047	1.845	0.065	Not significance
ITUE<---TPACK	0.139	0.037	3.112	**0.02	Significance
ITUE<---PT	0.209	0.038	4.583	***	Significance
BTU<---PT	0.247	0.045	5.016	***	Significance
BTU<---FC	0.332	0.062	6.027	***	Significance
BTU<---ITUE	0.530	0.068	8.650	***	Significance
Indirect Effects					
BTU<---ITUE<---PT	0.111	0.028	3.964	0.060	Not significance
BTU<---ITUE<---FC	0.142	0.027	5.259	0.095	Not significance

Note:***significant at <0.01;**significant at < 0.05;PE=Performance Expectation;EE=Effort

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Paths	Estimate	S. E.	C. R.	P-value	Significance
Expectation;SI=Social Expectation;FC=Facilitating Condition;HM=Hedonic Motivation;TI=Teacher Innovativeness;TPACK=TPACK Ability;PT=Perceived Trust;ITUE=Intention to Use;BTU=Behavior to Use					

Based on the results presented in the table, six variables exhibited a significant positive effect on Intention to Use (ITUE), while three variables showed a significant positive effect on Behavior to Use (BTU). Specifically:

Performance Expectation (PE) positively influenced ITUE ($\beta = 0.236, p < 0.01$)

Effort Expectation (EE) positively influenced ITUE ($\beta = 0.284, p < 0.01$)

Facilitating Conditions (FC) positively influenced ITUE ($\beta = 0.268, p < 0.01$)

Hedonic Motivation (HM) positively influenced ITUE ($\beta = 0.281, p < 0.01$)

Perceived Trust (PT) positively influenced ITUE ($\beta = 0.209, p < 0.01$)

TPACK Ability positively influenced ITUE ($\beta = 0.139, p < 0.05$)

Regarding Behavior to Use (BTU):

Perceived Trust (PT) showed a positive effect ($\beta = 0.247, p < 0.01$)

Facilitating Conditions (FC) demonstrated a positive effect ($\beta = 0.332, p < 0.01$)

Intention to Use (ITUE) had a strong positive effect ($\beta = 0.530, p < 0.01$)

Conversely, Social Influence (SI) and Teacher Innovativeness (TI) were found to have non-significant effects on ITUE.

Mediating Effects(Intention to use)

Intention to use did not significantly mediate the effects of perceived trust or facilitating conditions on behavior ($\beta = 0.111, p > 0.05; \beta = 0.142, p > 0.05$, respectively), suggesting full mediation was not supported.

4.2.7 Direct, Indirect and Total Effects

The results of the direct, indirect and total effects of the various variables on behavioral intention to use are shown in the sections below.

Direct effects

The direct effects examined in the analysis included the influences of Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC),

Hedonic Motivation (HM), Teacher Innovativeness (TI), Perceived Trust (PT), and TPACK Ability on Intention to Use (ITUE), with standardized path coefficients of 0.236, 0.284, 0.147, 0.268, 0.281, 0.120, 0.209, and 0.139, respectively. Additionally, the direct effects of Perceived Trust (PT), Facilitating Conditions (FC), and Intention to Use (ITUE) on Behavior to Use (BTU) were analyzed, yielding coefficients of 0.247, 0.332, and 0.530, respectively.

Indirect Effects

The indirect effects examined in the analysis included the pathway from Perceived Trust (PT) to Behavior to Use (BTU), with a coefficient of 0.111, and the pathway from Facilitating Conditions (FC) to BTU, with a coefficient of 0.142, as summarized in the table below.

Total Effects

The total effects of Performance Expectation (PE), Effort Expectation (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Teacher Innovativeness (TI), and TPACK Ability on Intention to Use (ITUE) were examined, with standardized coefficients of 0.236, 0.284, 0.147, 0.268, 0.281, 0.120, and 0.139, respectively. Additionally, the total effects of Perceived Trust (PT), Intention to Use (ITUE), and Facilitating Conditions (FC) on Behavior to Use (BTU) were analyzed, yielding coefficients of 0.357, 0.530, and 0.474, respectively.

Table 4.20 Direct, Indirect and Total Effects

	Direct Effects	Indirect Effects	Total Effects
ITUE<---PE	0.236	-	0.236
ITUE<---EE	0.284	-	0.284
ITUE<---SI	0.147	-	0.147
ITUE<---FC	0.268	-	0.268
ITUE<---HM	0.281	-	0.281
ITUE<---TI	0.120	-	0.120
ITUE<---TPACK	0.139	-	0.139
ITUE<---PT	0.209	-	0.209

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	Direct Effects	Indirect Effects	Total Effects
BTU<---PT	0.247	0.111(0.209*0.530)	0.357
BTU<---ITUE	0.530	-	0.530
BTU<---FC	0.332	0.142(0.268*0.530)	0.474

4.2.8 Research result of empirically determining the moderation effects of intention to use Platform in China

Moderation effects of gender variable for China

This section addresses the second research objective, which aims to empirically examine the moderating effect of gender on the intention to use digital platforms in China, through a moderated structural equation modeling (SEM) analysis with gender as the moderating variable.

The analysis incorporated thirteen variables: eight independent variables (Performance Expectation, Effort Expectation, Social Influence, Facilitating Conditions, Hedonic Motivation, Teacher Innovativeness, Perceived Trust, and TPACK Ability), one mediating variable (Intention to Use), one dependent variable (Behavior to Use), and three moderating variables (Gender, Experience, Culture).

The interaction effects between the independent variables (Performance Expectation, Effort Expectation, Social Influence, Facilitating Conditions, and Hedonic Motivation) and the moderating variable (Gender) were computed using standardized values. The model specification and results are presented in the figure below.

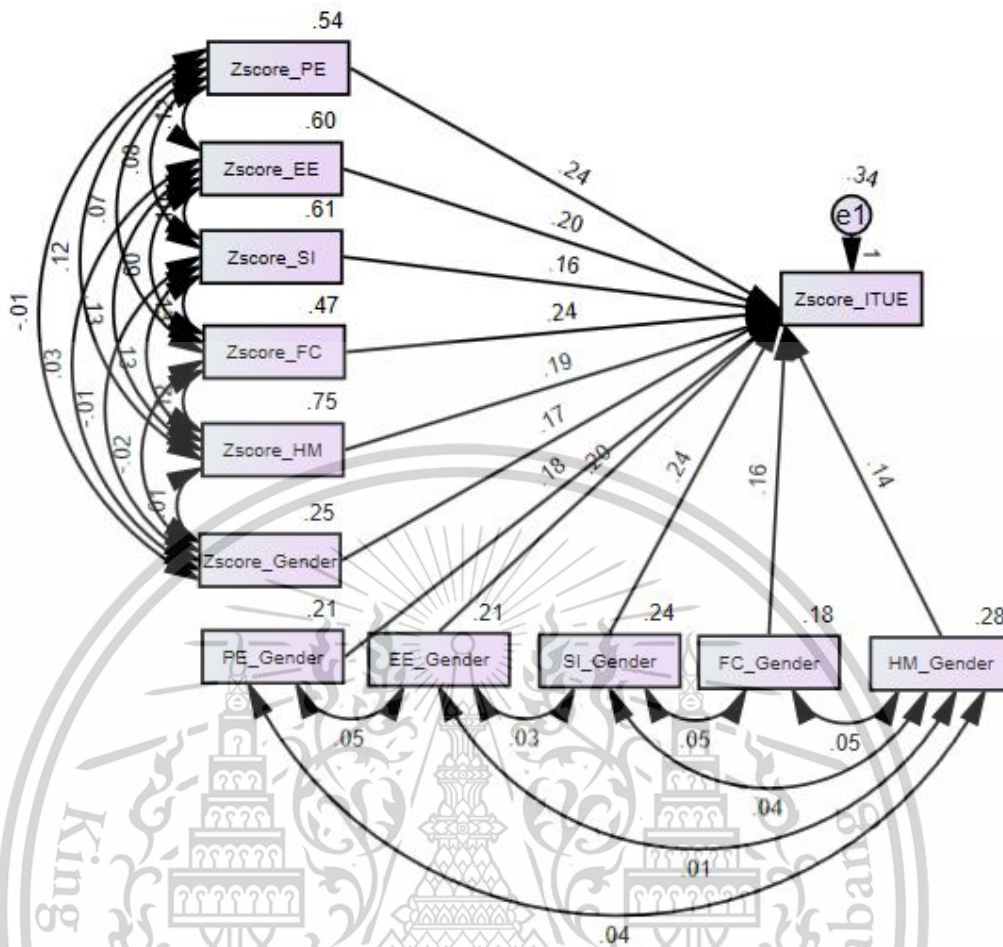


Figure 4.17 Moderation(gender) Analysis

Table 4.21 Moderation(gender)Analysis

	Estimate	S.E.	C.R.	P	Label
Z_ITUE<---Z_PE	0.245	0.033	7.318	***	
Z_ITUE<---Z_EE	0.202	0.032	6.300	***	
Z_ITUE<---Z_SI	0.163	0.032	5.120	***	
Z_ITUE<---Z_FC	0.239	0.036	6.476	***	
Z_ITUE<---Z_HM	0.186	0.029	6.476	***	
Z_ITUE<---Z_Gender	0.170	0.048	3.563	***	
Z_ITUE<---PE_Gender	0.179	0.054	3.308	***	
Z_ITUE<---EE_Gender	0.196	0.053	3.680	***	
Z_ITUE<---SI_Gender	0.238	0.050	4.737	***	

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	Estimate	S.E.	C.R.	P	Label
Z_ITUE<---FC_Gender	0.164	0.060	2.754	***	
Z_ITUE<---HM_Gender	0.139	0.047	2.985	***	

Note:***significant at <0.01;**significant at< 0.05;Z_PE=Standardized Performance Expectation;Z_EE=Standardized Effort Expectation;Z_SI=Standardized Social Influence;Z_FC=Standardized Facilitating Condition;Z_HM=Standardized Hedonic Motivation;Z_ITUE=Standardized Intention to Use

Based on the results presented in the table illustrating the moderating effects of gender on the relationships between the independent variables and the dependent variable (Intention to Use, ITUE), five interaction terms were found to be statistically significant.

The interaction between Performance Expectancy and gender (PE × Gender) exhibited a positive and significant effect on ITUE ($\beta = 0.179$, $p = 0.01$) at the 99% confidence level. Similarly, the interaction of Effort Expectancy and gender (EE × Gender) showed a positive and significant influence ($\beta = 0.196$, $p = 0.01$). The interaction involving Social Influence and gender (SI × Gender) also demonstrated a positive and significant effect ($\beta = 0.238$, $p = 0.01$). Furthermore, the interaction between Facilitating Conditions and gender (FC × Gender) was positive and significant ($\beta = 0.164$, $p = 0.01$), as was the interaction of Hedonic Motivation and gender (HM × Gender) ($\beta = 0.139$, $p = 0.01$).

These results indicate that gender significantly moderates the relationships between the independent variables—Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Hedonic Motivation—and the dependent variable, Intention to Use.

Moderation effects of experience variable for China

This section addresses the second research objective, which aims to empirically examine the moderating effect of experience on the intention to use digital platforms in China, through a moderated structural equation modeling (SEM) analysis with experience as the moderating variable.

The analysis incorporated thirteen variables: eight independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, This material is reserved for educational use only, not allowed for commercial use.

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Teacher Innovativeness, Perceived Trust, and TPACK Ability), one mediating variable (Intention to Use), one dependent variable (Behavior to Use), and three moderating variables (Gender, Experience, Culture).

The interaction effects between the independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Hedonic Motivation) and the moderating variable (Experience) were computed using standardized values. The model specification and results are presented in the figure below.

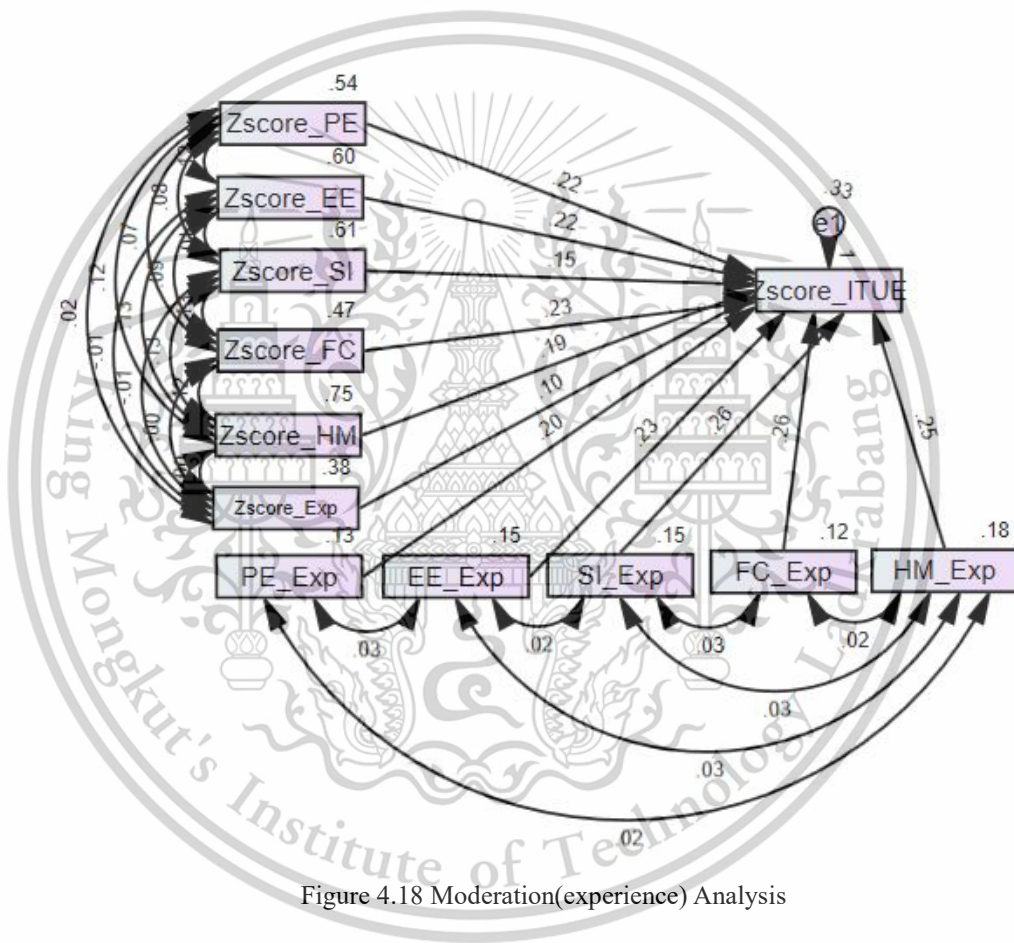


Table 4.22 Moderation(experience)Analysis

	Estimate	S.E.	C.R.	P	Label
Z_ITUE<---Z_PE	0.218	0.033	6.618	***	
Z_ITUE<---Z_EE	0.221	0.031	7.051	***	
Z_ITUE<---Z_SI	0.149	0.031	4.771	***	
Z_ITUE<---Z_FC	0.225	0.036	6.346	***	

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	Estimate	S.E.	C.R.	P	Label
Z_ITUE<---Z_HM	0.192	0.028	6.806	***	
Z_ITUE<---Z_Experience	0.105	0.038	2.781	***	
Z_ITUE<---PE_Exp	0.202	0.065	2.781	***	
Z_ITUE<---EE_Exp	0.235	0.062	3.099	***	
Z_ITUE<---SI_Exp	0.264	0.062	4.258	***	
Z_ITUE<---FC_Exp	0.262	0.070	3.736	***	
Z_ITUE<---HM_Exp	0.247	0.056	4.381	***	

Note:***significant at <0.01;**significant at < 0.05;Z_PE=Standardized Performance Expectation;Z_EE=Standardized Effort Expectation;Z_SI=Standardized Social Influence;Z_FC=Standardized Facilitating Condition;Z_HM=Standardized Hedonic Motivation;Z_ITUE=Standardized Intention to Use

As shown in the table summarizing the moderating effects of experience on the relationships between the independent variables and the dependent variable (Intention to Use, ITUE), all interaction terms were statistically significant.

The interaction between Performance Expectation and experience (PE × Exp) exhibited a positive and significant effect on ITUE ($\beta = 0.202$, $p < 0.01$) at the 99% confidence level. Similarly, the interaction of Effort Expectation and experience (EE × Exp) showed a positive and significant influence ($\beta = 0.235$, $p < 0.01$). The interaction involving Social Influence and experience (SI × Exp) also demonstrated a positive and significant effect ($\beta = 0.264$, $p < 0.01$). Furthermore, the interaction between Facilitating Conditions and experience (FC × Exp) was positive and significant ($\beta = 0.262$, $p < 0.01$), as was the interaction of Hedonic Motivation and experience (HM × Exp) ($\beta = 0.247$, $p < 0.01$).

These results indicate that experience significantly moderates the relationships between the independent variables—Performance Expectation, Effort Expectation, Social Influence, Facilitating Conditions, and Hedonic Motivation—and the dependent variable, Intention to Use.

Moderation effects of culture for China

This section addresses the second research objective, which aims to empirically examine

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the moderating effect of culture on the intention to use digital platforms in China, through a moderated structural equation modeling (SEM) analysis with culture as the moderating variable.

The analysis incorporated thirteen variables: eight independent variables (Performance Expectation, Effort Expectation, Social Influence, Facilitating Conditions, Hedonic Motivation, Teacher Innovativeness, Perceived Trust, and TPACK Ability), one mediating variable (Intention to Use), one dependent variable (Behavior to Use), and three moderating variables (Gender, Experience, Culture).

The interaction effects between the independent variables (Performance Expectation, Effort Expectation, Social Influence, Facilitating Conditions, and Hedonic Motivation) and the moderating variable (Culture) were computed using standardized values. The model specification and results are presented in the figure below.

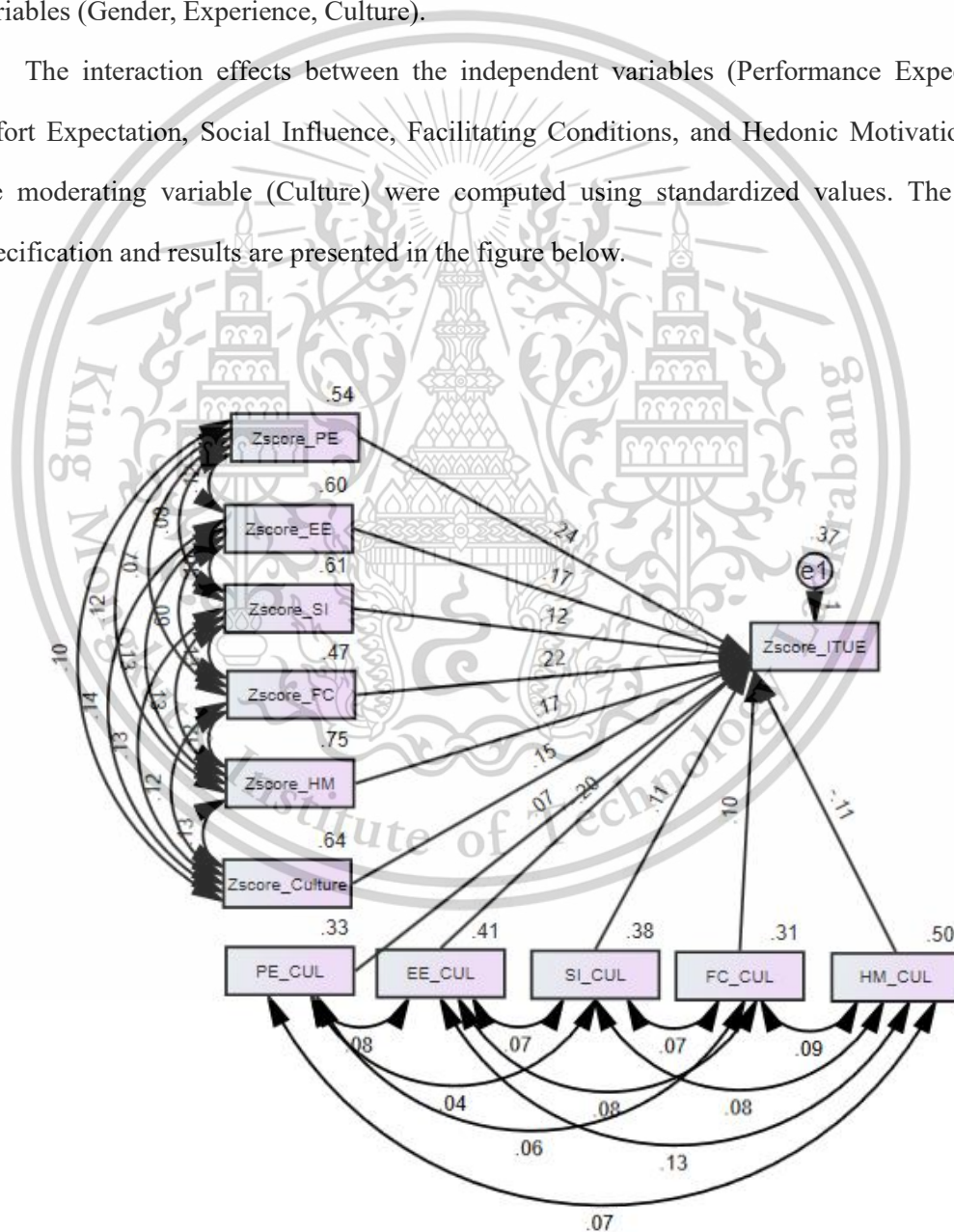


Figure 4.19 Moderation(culture) Analysis

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Table 4.23 Moderation(culture)Analysis

	Estimate	S.E.	C.R.	P	Label
Z_ITUE<---Z_PE	0.240	0.035	6.836	***	
Z_ITUE<---Z_EE	0.167	0.034	4.941	***	
Z_ITUE<---Z_SI	0.119	0.033	3.568	***	
Z_ITUE<---Z_FC	0.223	0.039	5.803	***	
Z_ITUE<---Z_HM	0.166	0.030	5.475	***	
Z_ITUE<---Z_Culture	0.147	0.033	4.455	***	
Z_ITUE<---PE_Cul	0.066	0.045	1.478	0.139	
Z_ITUE<---EE_Cul	-0.197	0.042	-4.751	***	
Z_ITUE<---SI_Cul	0.106	0.041	2.572	**0.010	
Z_ITUE<---FC_Cul	0.097	0.047	2.048	**0.041	
Z_ITUE<---HM_Cul	-0.114	0.037	-3.040	***	

Note:***significant at <0.01;**significant at< 0.05;Z_PE=Standardized Performance Expectation;Z_EE=Standardized Effort Expectation;Z_SI=Standardized Social Influence;Z_FC=Standardized Facilitating Condition;Z_HM=Standardized Hedonic Motivation;Z_ITUE=Standardized Intention to Use

As indicated in the table summarizing the moderating effects of culture on the relationships between the independent variables and the dependent variable (Intention to Use, ITUE), four interaction terms demonstrated statistical significance.

The interaction between Effort Expectancy and culture (EE × Cul) exhibited a negative and significant effect on ITUE ($\beta = -0.197$, $p = 0.01$) at the 99% confidence level. Similarly, the interaction of Hedonic Motivation and culture (HM × Cul) showed a negative and significant influence ($\beta = -0.114$, $p = 0.01$). In contrast, the interaction between Social Influence and culture (SI × Cul) had a positive and significant effect ($\beta = 0.106$, $p < 0.05$) at the 95% confidence level, as did the interaction between Facilitating Conditions and culture (FC × Cul) ($\beta = 0.097$, $p < 0.05$).

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These findings indicate that culture serves as a significant moderator of the relationships between the independent variables—Effort Expectancy, Social Influence, Facilitating Conditions, and Hedonic Motivation—and the dependent variable, Intention to Use.

Conversely, the interaction between Performance Expectancy and culture (PE × Cul) was not statistically significant at either the 95% or 99% confidence levels, indicating that culture does not moderate the relationship between Performance Expectancy and Intention to Use.

4.3 Research result of empirical analysis to determine the effects of behavioral and intention to use platforms in China

The empirical analysis examining the factors influencing behavioral intention and usage of digital platforms in China was conducted within the conceptual framework outlined in Chapter 3 and tested against the corresponding research hypotheses. The findings pertaining to each hypothesis are presented below.

Hypothesis Testing

Table 4.24 Results of Hypothesis Testing

Hypothesis	Explanation	Decision	Beta
H1	Performance Expectation(PE)has a positive effect on the intention of teachers to use digital education platforms.	Accept	0.236 ***
H2	Effort Expectation(EE) has a positive effect on the intention of teachers to use digital education platforms.	Accept	0.284 ***
H3	Social Influence(SI) has a positive effect on the intention of teachers to use digital education platforms.	Reject	0.147
H4	Facilitating Condition(FC)has a positive effect on the intention of teachers to use digital education platforms.	Accept	0.268 ***
H5	Hedonic Motivation(HM)has a positive effect on the intention of teachers to use digital education platforms.	Accept	0.281 ***
H6	Teacher Innovativeness(TI)has a positive effect on the intention of teachers to use digital education platforms.	Reject	0.120
H7	Perceived Trust(PT)has a positive effect on the intention of teachers to use digital education platforms.	Accept	0.209 ***

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Hypothesis	Explanation	Decision Beta	
H8	TPACK has a significant positive effect on the intention of teachers to use digital education platforms.	0.139 **	Accept
H9	Facilitating Condition(FC) has a positive effect on the behavior of teachers to use digital education platforms.	0.332 ***	Accept
H10	Perceived Trust(PT) has a positive effect on the behavior of teachers to use digital education platforms.	0.247 ***	Accept
H11	Intention To Use(UI) has a positive effect on the behavior of teachers to use digital education platforms.	0.530 ***	Accept
H12	Intention To Use(UI) mediates a effect of perceived trust on behavior to use digital education platforms.	0.111	Reject
H13	There are differences in PE、EE、SI、FC、HM among teachers of different genders.	PE→ITUE ***	Accept
		EE→ITUE ***	Accept
		SI→ITUE ***	Accept
		FC→ITUE ***	Accept
		HM→ITUE ***	Accept
H14	There are differences in PE、EE、SE、FC、HM among teachers of different teaching experience.	PE→ITUE ***	Accept
		EE→ITUE ***	Accept
		SI→ITUE ***	Accept
		FC→ITUE ***	Accept
H15	There are differences in PE、EE、SE、FC、HM among teachers of different teaching experience.	HM→ITUE ***	Accept
		PE→ITUE	Reject

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Hypothesis	Explanation	Decision Beta	
	HM among teachers of culture.	EE→ITUE	-0.197 *** Accept
		SI→ITUE	0.106 ** Accept
		FC→ITUE	0.097 ** Accept
		HM→ITUE	-0.114 *** Accept

Based on the table above, the hypothesis of the study is discussed.

The empirical examination of factors influencing teachers' intention and behavior regarding digital education platform usage in China was conducted within the conceptual framework and corresponding hypotheses formulated in Chapter 3. The results for each hypothesis are presented as follows:

H1: Performance Expectation (PE) positively affects intention to use (ITUE).

Result: Supported ($\beta = 0.236$, $p < 0.01$).

H2: Effort Expectation (EE) positively affects ITUE.

Result: Supported ($\beta = 0.284$, $p < 0.01$).

H3: Social Influence (SI) positively affects ITUE.

Result: Not Supported ($\beta = 0.147$, $p = 0.05$).

H4: Facilitating Conditions (FC) positively affects ITUE.

Result: Supported ($\beta = 0.268$, $p < 0.01$).

H5: Hedonic Motivation (HM) positively affects ITUE.

Result: Supported ($\beta = 0.281$, $p < 0.01$).

H6: Teacher Innovativeness (TI) positively affects ITUE.

Result: Not supported ($\beta = 0.120$, $p > 0.05$).

H7: Perceived Trust (PT) positively affects ITUE.

Result: Supported ($\beta = 0.209$, $p < 0.01$).

H8: TPACK Ability positively affects ITUE.

Result: Supported ($\beta = 0.139$, $p < 0.05$).

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H9: Facilitating Conditions (FC) positively affect behavior to use (BTU).

Result: Supported ($\beta = 0.332, p < 0.01$).

H10: Perceived Trust (PT) positively affects BTU.

Result: Supported ($\beta = 0.247, p < 0.01$).

H11: Intention to Use (ITUE) positively affects BTU.

Result: Supported ($\beta = 0.530, p < 0.01$).

H12: ITUE mediates the effect of PT on BTU.

Result: Not supported; mediation was insignificant ($\beta = 0.111, p > 0.05$).

H13: Teacher gender moderates the effect of PE, EE, SI, FC, and HM on ITUE.

Result: Supported; gender is a significant moderator.

H14: Teaching experience moderates the effect of PE, EE, SI, FC, and HM on ITUE.

Result: Supported; experience is a significant moderator.

H15: Culture moderates the effect of PE, EE, SI, FC, and HM on ITUE.

Result: Partially supported; culture significantly moderates SI and FC (positive), and EE and HM (negative), but does not moderate PE.

CHAPTER 5

CONCLUSIONS, DISCUSSIONS AND RECOMMENDATION

5.1 Introduction

This study extended the UTAUT2 model by incorporating teacher innovativeness, perceived trust, and TPACK ability to empirically investigate rural teachers' intention and usage behavior regarding digital education platforms in China. The research aimed to examine how independent variables—performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, teacher innovativeness, perceived trust, and TPACK ability—influence the dependent variables intention to use and usage behavior. It also assessed the moderating effects of gender, teaching experience, and culture on the relationships between the independent variables (performance expectancy, effort expectancy, social influence, facilitating conditions, and hedonic motivation) and intention to use, as well as the mediating role of intention to use in the relationship between perceived trust and usage behavior.

The study operationalized 30 observed variables, 10 latent constructs, and 3 moderating variables. Data were collected from 612 respondents across China and analyzed using descriptive statistics, correlation analysis, reliability and validity assessments, confirmatory factor analysis (CFA), and structural equation modeling (SEM). Based on the results presented in previous chapters, this chapter provides a discussion of the findings, a summary of key results, along with theoretical and practical implications, and recommendations for future research.

5.2 Conclusions

The purpose of this study is to empirically examine rural teachers' intention and usage behavior regarding digital education platforms in China, by integrating teacher innovativeness,

perceived trust, and TPACK ability into an adapted UTAUT2 framework. Based on the results and discussion presented earlier, the conclusions of this research are summarized as follows.

First, the analysis confirmed that the proposed model meets all requisite criteria—including reliability, validity, and goodness-of-fit indices—indicating that the findings are statistically robust and credible.

Second, this research examined the impact of multiple exogenous variables on teachers' intention and actual usage behavior. The results demonstrate that six constructs—performance expectancy, effort expectancy, facilitating conditions, hedonic motivation, perceived trust, and TPACK ability—exert a positive and significant influence on teachers' intention to use digital education platforms. Furthermore, three factors—perceived trust, facilitating conditions, and behavioral intention—significantly and positively affect teachers' actual usage behavior.

Additionally, this study investigated the moderating roles of gender, experience, and culture. The findings indicate that gender significantly and positively moderates the relationships between intention and the following predictors: performance expectancy, effort expectancy, social influence, facilitating conditions, and hedonic motivation. Similarly, experience also serves as a positive and significant moderator between these same independent variables and intention.

Regarding cultural moderation, the analysis reveals a positive and significant moderating effect on the paths from social influence and facilitating conditions to intention. In contrast, culture negatively and significantly moderates the effects of effort expectation and hedonic motivation on intention. Moreover, culture exhibits a positive but statistically insignificant moderating effect on the relationship between performance expectation and intention.

5.3 Discussion of the Findings

The discussion of the research findings is structured in accordance with the study's research questions and hypotheses. Each finding is evaluated with reference to prior research to determine whether the results align with or diverge from existing literature.

5.3.1 Factors Influencing the Intention to Use Digital Education Platform

This section addresses Objectives 1 and 4 by examining the factors influencing intention and behavior related to the use of digital education platforms. The discussion responds to the research question: “What factors influence intention and behavior regarding the use of digital education platforms in China?”

5.3.2 The Case for Effect

Effect of PE on ITUE

Performance expectancy (PE) was found to exert a positive and significant effect on teachers’ intention to use digital education platforms ($\beta = 0.236, p < 0.01$). This result is consistent with previous research in related domains. For instance, (Tseng, LinWang& Liu, 2022) also reported a significant influence of performance expectancy on the adoption of digital education platforms. Similarly, (Engotoit,Kituyi & Moya, 2016)demonstrated that performance expectancy considerably affects behavioral intention in the context of communication technology use.

Effect of EE on ITUE

Effort expectation (EE) demonstrated a positive and significant effect on teachers’ intention to use digital education platforms ($\beta = 0.284, p < 0.01$). These findings indicate that perceptions of effort and ease of use substantially influence teachers’ adoption intentions. This result aligns with prior research, such as Alkhunaizan and Love (2012), who reported a significant impact of effort expectation on behavioral intention in the context of mobile commerce technologies. Similarly, Wang (2010) found that effort expectation significantly affects behavioral intention to use Internet-based services.

Effect of SI on ITUE

Social influence (SI) was observed to have a positive yet statistically insignificant effect on teachers’ intention to use digital education platforms ($\beta = 0.147, p > 0.05$). The results suggest that an increase in social influence—comprising both general and peer influence—may lead to a rise in behavioral intention, though this relationship was not significant in the current sample.

These findings partially align with previous research. For instance, Morosan and

DeFranco (2016) reported a significant effect of social influence on the intention to use NFC mobile payments in hotels. In contrast, Jeng and Tzeng (2012) found that social influence did not significantly affect behavioral intention among medical professionals using a clinical decision support system (CDSS), indicating that contextual and occupational factors may moderate the role of social influence.

Effect of FC on ITUE

Facilitating conditions (FC) demonstrated a positive and significant effect on teachers' intention to use digital education platforms ($\beta = 0.268$, $p < 0.01$). This indicates that improvements in perceived behavioral control and resource support are likely to enhance teachers' behavioral intention to adopt these platforms. These findings align with previous studies, such as Sam and Baharin (2018), who reported that facilitating conditions significantly and positively influence behavioral intention in the context of online booking systems. Similarly, Almatari, Lahad, and Balaid (2013) found that facilitating conditions substantially predict students' intention to use mobile learning.

Effect of HM on ITUE

Hedonic motivation (HM) exhibited a positive and significant effect on teachers' intention to use digital education platforms ($\beta = 0.281$, $p < 0.01$). This suggests that dimensions such as user attention, curiosity, and enjoyment play a crucial role in shaping behavioral intention. The results are consistent with existing literature: Lakhali, Khechine, and Pascot (2013) highlighted the motivational role of enjoyment in technology adoption. Furthermore, Sierens (2009) identified a positive relationship between perceived autonomy and self-regulated learning intention, while Jang, Reeve, and Deci (2010) emphasized that autonomy support and structure significantly influence students' behavioral engagement in online learning environments.

Effect of TI on ITUE

Teacher innovativeness (TI) showed a positive but statistically insignificant effect on intention to use ($\beta = 0.120$, $p > 0.05$). Although not significant, the result suggests a tendency that higher levels of innate and domain-specific innovativeness may enhance intention to adopt digital platforms. These observations partially align with Scuotto, Del Giudice, and Carayannis (2017), who highlighted the role of absorptive capacity in innovation adoption,

and Mayeh, Ramayah, and Popa (2014), who reported significant effects within ERP adoption contexts.

Effect of PT on ITUE

Perceived trust (PT) exerted a positive and significant effect on intention to use ($\beta = 0.209$, $p < 0.01$), indicating that trust—comprising system quality, relationship quality, and service quality—positively influences teachers' adoption intentions. This is consistent with Gupta and Dogra (2017), who identified trust as critical in technology adoption among travelers, and San Martín and Herrero (2012), who noted its role in online purchasing behavior.

Effect of TPACK on ITUE

TPACK ability showed a positive and significant effect on intention to use ($\beta = 0.139$, $p < 0.05$), though the effect size was modest. This suggests that technological-pedagogical knowledge contributes to, but is not a dominant predictor of, usage intention. Divergence from earlier studies such as Alkhunaizan and Love (2012) or Wang (2010) may be attributed to contextual differences in sample and technology type.

Effect of FC on BTU

Facilitating conditions (FC) significantly predicted behavior to use ($\beta = 0.332$, $p < 0.01$), corroborating findings by Sam and Baharin (2018) in online booking systems and Almatari, Lahad, and Balaid (2013) in mobile learning contexts.

Effect of PT on BTU

Perceived trust also showed a significant positive effect on usage behavior ($\beta = 0.247$, $p < 0.01$), reinforcing its importance in behavioral models.

Effect of ITUE on BTU

Intention to use strongly predicted behavior to use ($\beta = 0.530$, $p < 0.01$), aligning with theories of planned behavior and technology acceptance.

Mediating Effects

Intention to use did not significantly mediate the effects of perceived trust or facilitating conditions on behavior ($\beta = 0.111$, $p > 0.05$; $\beta = 0.142$, $p > 0.05$, respectively), suggesting full mediation was not supported.

5.3.3 Moderating Effect of Gender

This section addresses the second research objective by examining the moderating effect of teacher gender on factors influencing intention to use digital education platforms. The analysis responds to the objective: “To empirically determine the moderation effect of gender on intention to use digital education platforms in China.” The results are summarized as follows:

Gender significantly moderated all five hypothesized relationships:

Performance Expectation(PE): A positive and significant interaction effect was observed ($\beta = 0.179, p < 0.01$).

Effort Expectation (EE): Gender positively and significantly moderated the relationship ($\beta = 0.196, p < 0.01$).

Social Influence (SI): A significant moderating effect was found ($\beta = 0.238, p < 0.01$).

Facilitating Conditions (FC): Gender significantly strengthened the relationship ($\beta = 0.164, p < 0.01$).

Hedonic Motivation (HM): A positive and significant moderating effect was identified ($\beta = 0.139, p < 0.01$).

These results indicate that teacher gender consistently enhances the effects of key psychological and contextual factors on teachers' intention to adopt digital education platforms.

5.3.4 Moderating Effect of Experience

This section addresses the second research objective by examining the moderating effect of teaching experience on factors influencing intention to use digital education platforms. The analysis responds to the objective: “To empirically determine the moderation effect of experience on intention to use digital education platforms in China.” The results are summarized as follows:

Experience significantly moderated all five hypothesized relationships:

Performance Expectation(PE): A positive and significant interaction effect was observed ($\beta = 0.202, p < 0.01$).

Effort Expectation (EE): Experience positively and significantly moderated the

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relationship ($\beta = 0.235, p < 0.01$).

Social Influence (SI): A significant moderating effect was found ($\beta = 0.264, p < 0.01$).

Facilitating Conditions (FC): Experience significantly strengthened the relationship ($\beta = 0.262, p < 0.01$).

Hedonic Motivation (HM): A positive and significant moderating effect was identified ($\beta = 0.247, p < 0.01$).

These results indicate that teaching experience consistently enhances the effects of key psychological and contextual factors on teachers' intention to adopt digital education platforms.

5.3.5 Moderating Effect of Culture

This section addresses the second research objective by examining the moderating effect of culture on factors influencing intention to use digital education platforms. The analysis responds to the objective: "To empirically determine the moderation effect of culture on intention to use digital education platforms in China." The results are summarized as follows:

Culture demonstrated differentiated moderating effects across the five hypothesized relationships:

Performance Expectation (PE): The moderating effect was positive but statistically insignificant ($\beta = 0.066, p > 0.05$).

Effort Expectation (EE): Culture showed a negative and significant moderating effect ($\beta = -0.197, p < 0.01$).

Social Influence (SI): A positive and significant moderating effect was observed ($\beta = 0.106, p < 0.05$).

Facilitating Conditions (FC): The moderating effect was positive and significant ($\beta = 0.097, p < 0.05$).

Hedonic Motivation (HM): Culture exerted a negative and significant moderating effect ($\beta = -0.114, p < 0.01$).

These results indicate that culture serves as a significant moderator for most of the proposed relationships, though its effects vary in direction and magnitude across different antecedents of intention.

5.4 Implications

The findings of this study contribute significantly to expanding theoretical and empirical understanding regarding the adoption of digital education platforms among rural teachers. Furthermore, it offers practical insights and managerial implications to guide the development and enhancement of platform implementation. These implications are elaborated below.

5.4.1 Practical Implications

Digital education platforms, particularly within foundational education, represent a transformative trend that has evolved over several decades. However, their critical importance became fully apparent only in 2020 during the COVID-19 pandemic, when social distancing and lockdown measures necessitated a rapid shift to online instruction in many educational institutions. Despite this transition, the factors influencing teachers' intention to use such platforms have remained inadequately examined. This study addresses this gap by identifying key determinants relevant to the adoption and implementation of digital education platforms in basic education.

First, educational authorities can utilize these findings to assess student responses to digital platforms—particularly regarding aspects highlighted in this research. For example,

Performance expectations positively influence teachers' engagement with digital platforms. Schools should incorporate platform usage performance into faculty evaluations, establish awards like the "Digital Teaching Innovation Award", and offer preferential treatment in professional title evaluations to motivate proactive exploration. Platform providers should streamline operational workflows, deliver personalized lesson preparation resources and teaching strategies, while also providing equipment maintenance services.

If we aim to positively influence teachers' use of digital platforms, schools can showcase their application effectiveness through case studies and teaching achievement exhibitions, making these efforts perceptible and shareable. For platform providers, developing digital tracking modules would allow monitoring of teacher engagement rates and student participation levels.

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Since motivational factors positively influence teachers' adoption of digital platforms, schools should promote cross-campus collaboration in sharing teaching resources and exchanging experiences to foster a cooperative research culture. Meanwhile, platform providers should establish user feedback mechanisms, conduct regular evaluations of platform effectiveness, and enhance their promotional efforts.

The hedonic motivation positively influences teachers' engagement with digital platforms. Schools can leverage interactive features of smart classrooms to enhance user experience, develop school-specific resource libraries, and attract teachers' proactive exploration through innovative content. Platform providers should optimize visual interface designs with dynamic themes and personalized skins to boost emotional satisfaction during usage.

Second, the study offers valuable guidance for basic education officials in selecting factors to consider when deploying digital platforms and associated online learning programs aimed at enhancing educational quality.

Third, the incorporation of Perceived Trust and TPACK Ability into the research model revealed these variables as significant predictors of teachers' behavioral intention to use digital platforms. Consequently, educational institutions and platform developers should prioritize pedagogical and content improvements that strengthen technological integration and instructional design. This includes evaluating whether technical knowledge of the platform can be effectively embedded into teaching practices to support technology-enhanced strategies—such as online inquiry-based learning—and whether such integration facilitates student comprehension, knowledge internalization, and transfer. These aspects represent crucial considerations for advancing both teaching methodologies and curricular content in digital environments.

5.4.2 Theoretical Implications

Theoretically, this research adopts a model grounded in the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2), as proposed by (Venkatesh, Morris, Davis & Davis, 2003). The original UTAUT model posits seven core constructs—performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation,

price value, and habit (Brown & Venkatesh, 2005)—that shape behavioral intention and actual use of technological systems. This study extends that framework by integrating three additional variables: Teacher Innovativeness, Perceived Trust, and TPACK Ability.

Innovativeness is conceptualized in two dimensions: innate innovativeness, referring to an individual's inherent psychological readiness to adopt new products, reflecting stable internal traits and behavioral tendencies (G. Roehrich, 2004); and domain-specific innovativeness, which captures openness to innovations within a particular field.

Perceived Trust is operationalized through three dimensions: system quality, derived from the Information System Success Model (Delone & Mclean, 1992), which includes technical attributes such as functionality, flexibility, and reliability; relationship quality, reflecting user-platform and interpersonal dynamics; and service quality, encompassing perceived value and user satisfaction.

Technological Pedagogical and Content Knowledge (TPACK) denotes the integration of technological, pedagogical, and content knowledge, representing an individual's belief in their capability to implement technology-supported digital teaching effectively.

The inclusion of these constructs has proven theoretically valuable, as results confirm their significant influence on teachers' intention and behavior related to digital platform usage.

5.5 Imitations and Recommendations

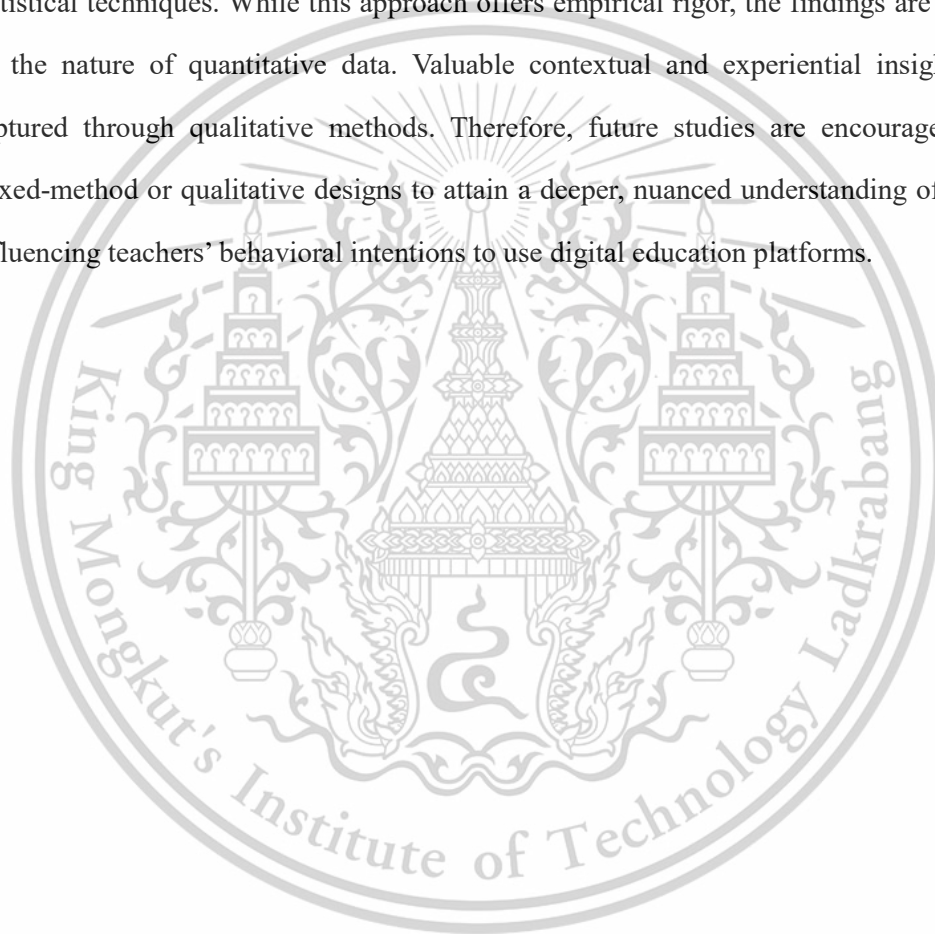
This section outlines the limitations of the present study and offers recommendations for future research.

First, the investigation was conducted exclusively among rural teachers in China. Consequently, the generalizability of the findings is context-specific and should be interpreted with caution. Future studies could extend this line of inquiry to other higher education settings to enhance external validity.

Second, the theoretical model adopted in this research was adapted from the UTAUT2 framework. Specifically, the constructs of price value and habit were excluded, while three additional variables—Teacher Innovativeness, Perceived Trust, and TPACK Ability—were

incorporated. Although UTAUT2 itself synthesizes elements from multiple foundational theories—including UTAUT, TAM, IDT, TRA, the Motivational Model, TPB, a hybrid TAM-TPB model, the Model of PC Utilization, and Social Cognitive Theory (SCT)—the current adaptation may have omitted potentially relevant factors. Thus, it is recommended that subsequent research employ the complete UTAUT2 model, integrating price value and habit to achieve a more comprehensive theoretical representation.

Third, this study relied solely on a quantitative methodology, with data analyzed through statistical techniques. While this approach offers empirical rigor, the findings are constrained by the nature of quantitative data. Valuable contextual and experiential insights may be captured through qualitative methods. Therefore, future studies are encouraged to adopt mixed-method or qualitative designs to attain a deeper, nuanced understanding of the factors influencing teachers' behavioral intentions to use digital education platforms.



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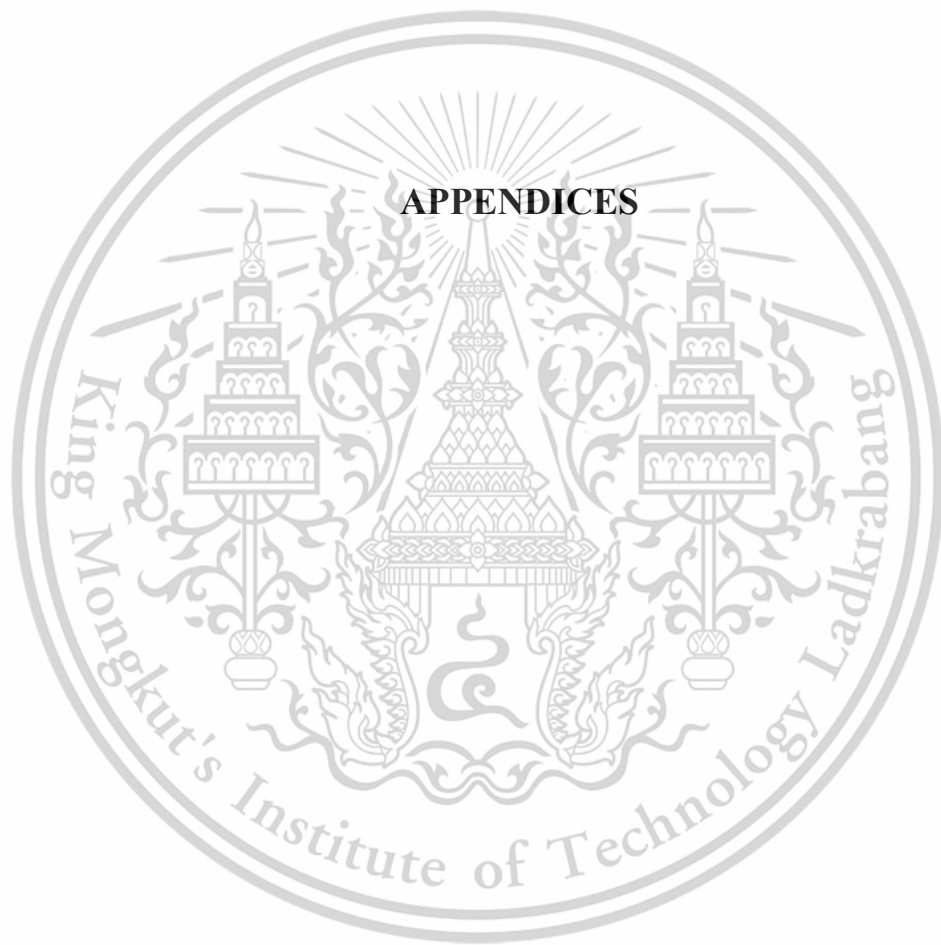
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<https://www.cqvip.com/doc/journal/923080538>

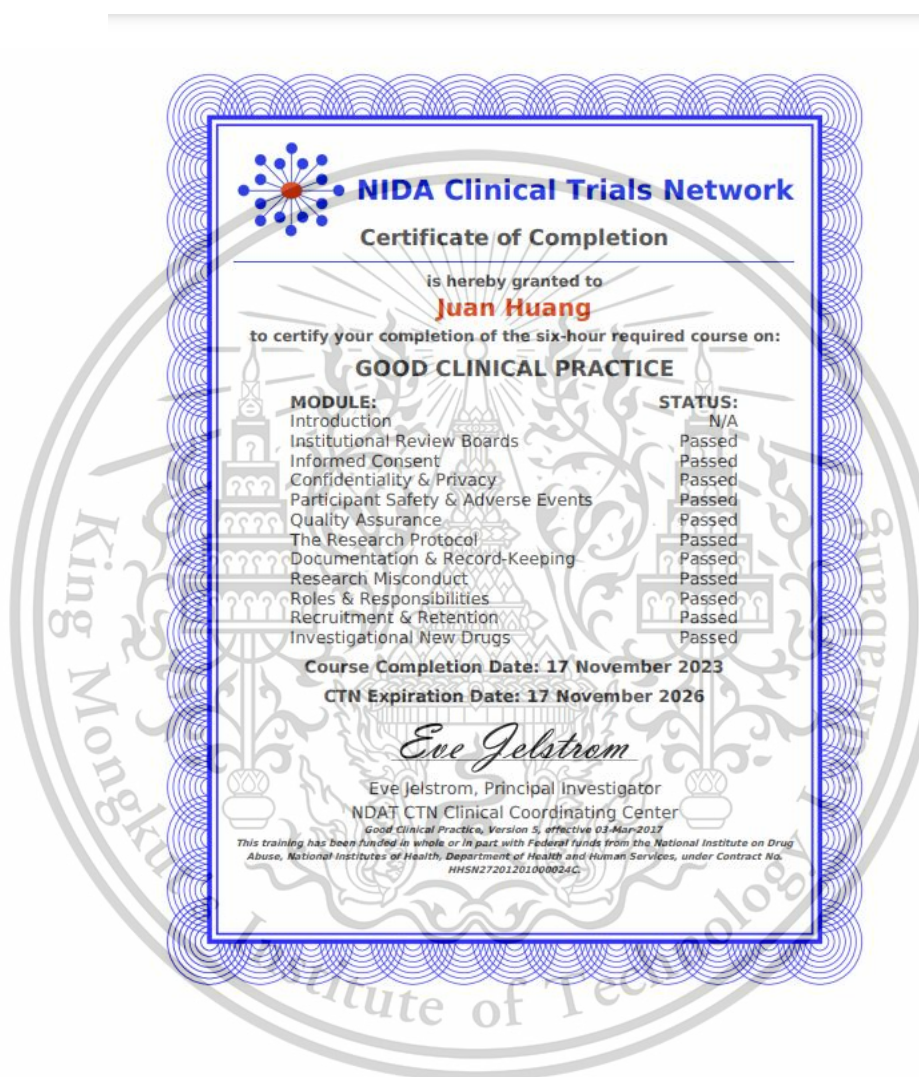


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APPENDIX A

ETHICAL TRAINING CERTIFICATE



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Announcement
 KMITL Business School
 King Mongkut's Institute of Technology Ladkrabang
 Result of Dissertation Outline Approval (Ms. Juan Huang)

KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, with the approval of the Dissertation Proposal Committee, would like to announce the research topic and approve the Dissertation outline of the Doctor of Philosophy Program in Industrial Business Administration (International Program), which was approved on 22 April 2024 to proceed as follows:

Ms. Juan Huang, Student ID 65106039 is allowed to do a Dissertation on the topic of "FACTORS INFLUENCING OF RURAL TEACHERS' IN CHINA INTENTION AND BEHAVIOR TO USE DIGITAL EDUCATION PLATFORM RESOURCES BASED ON UTAUT2 MODEL" with Dr. Saichon Pinmanee as a main advisor and Assoc. Prof. Dr. Singha Chaveesuk as a co-advisor.

In this regard, the student is required to research and write a Dissertation by consulting with her advisors to complete it within the stipulated time in the regulations of King Mongkut's Institute of Technology Ladkrabang.

Announced on August 5, 2024


 (Associate Professor Dr. Singha Chaveesuk)
 Dean, KMITL Business School



2024/08/05 Time 16:39:28 Non-PKI Server Sign-LN
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铜仁职业技术学院伦理委员会
Ethics Committee of Tongren Polytechnic College

铜仁职业技术学院伦理委员会审批表

Ethics Approval Form of the Ethics Committee of Tongren Polytechnic College

编号 (No.):

项目名称 Research Title	基于 UTAUT2 模型下影响我国乡村教师使用数字教育平台的意愿和行为因素 FACTORS INFLUENCING OF RURAL TEACHERS' IN CHINA INTENTION AND BEHAVIOR TO USE DIGITAL EDUCATION PLATFORM RESOURCES BASED ON UTAUT2 MODEL				
项目负责人 Principal Investigator	黄娟 Juan Huang	研究方向 Research Field	应用经济 Applied economics	研究期限 Research Period	4 年
职称 Academic Level	博士研究生在读 PhD. Candidate	联系方式 Phone Number	18685681320	电子邮箱 E-mail	410667103@qq.com
项目来源 Issued By	<input type="checkbox"/> 国家自然科学基金 (National Natural Science Foundation of China) <input type="checkbox"/> 贵州省教育厅 (Department of Education of Guizhou Province) <input type="checkbox"/> 贵州省科技厅 (Science and Technology Department of Guizhou Province) <input type="checkbox"/> 贵州省自然科学基金 (Natural Science Foundation of Guizhou Province) <input checked="" type="checkbox"/> 其他 (Others):				
审查内容 Review Content	<input checked="" type="checkbox"/> 项目研究计划 (Full proposal version1, date: 22/04/2024) <input checked="" type="checkbox"/> 项目参与人员知情同意书 (Informed consent form version, date: 23/04/2024) <input checked="" type="checkbox"/> 问卷调查 (Questionnaire) <input checked="" type="checkbox"/> 调查人员资格要求 (Qualifications of the investigators)				
项目负责人承诺 Commitment	<p>以上所填内容均属实, 如获批准, 我将严格按照提供的方案进行研究, 并遵守铜仁职业技术学院伦理委员会的相关规定。</p> <p>The above information is true and accurate. If approved, I commit to conducting the research in strict accordance with the proposed plan and adhering to the relevant regulations of the Ethics Committee of Tongren Polytechnic College.</p> <p>项目负责人签字 (Signature):  Juan Huang</p>				
审查结果 Review Result	<input checked="" type="checkbox"/> 同意 Approved <input type="checkbox"/> 不同意 Not Approved				
伦理委员会签章 (Signature/Stamp):	<p>铜仁职业技术学院伦理委员会</p> <p>The Ethics Committee of Tongren Polytechnic College</p> <p>日期 Date: 2024.8.18</p> 				

注: 本审批表一式两份, 提交至伦理委员会签章。

地址: 贵州省铜仁市碧江区自由路 2 号

邮编: 554300

电话: 0856-6909043

Address: No.2 Ziyou Road, Bijiang District, Tongren, Guizhou, 554300

Tel: 0856-6909043

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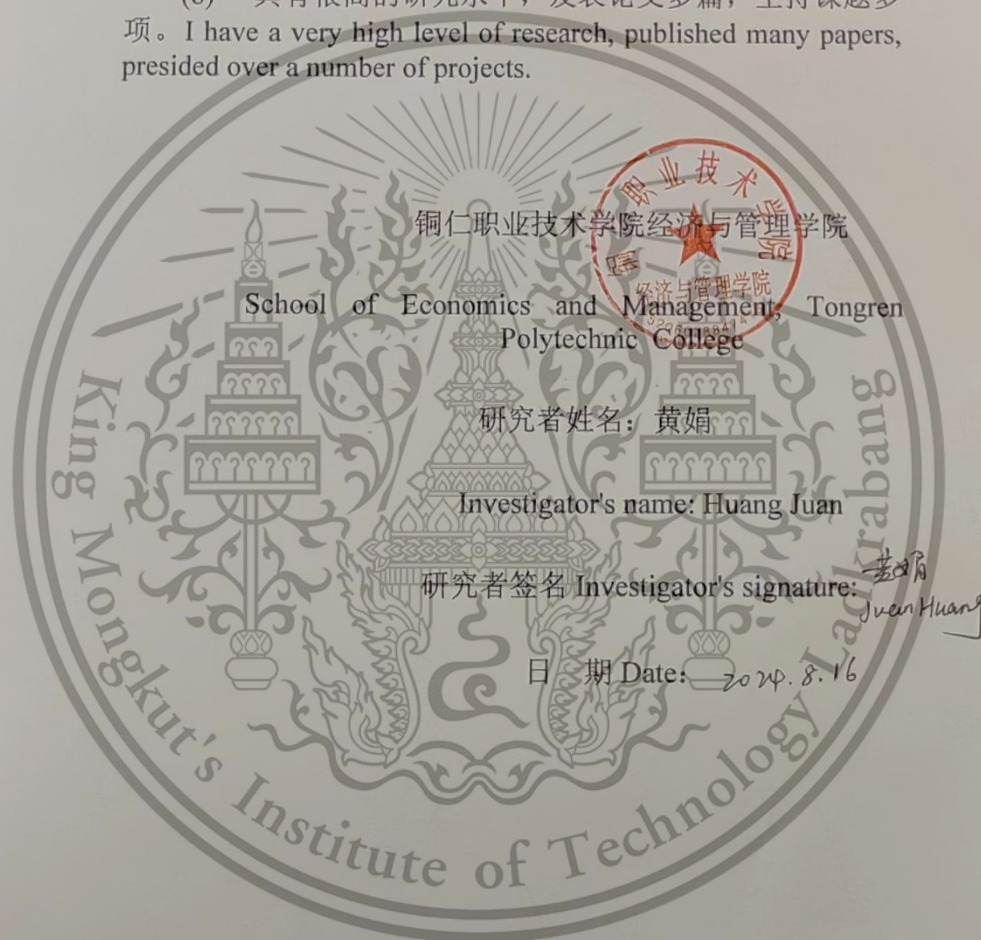
调查人员标准 Investigator standards

本人在铜仁职业技术学院任支部书记，副教授职称，硕士研究生学历，作为调查人员具备下列基本条件 I have served as the branch secretary of Tongren Vocational and Technical College, with associate professor title and master's degree. As an investigator, I have the following basic conditions:

- (1) 工作认真负责，对社会对人民富有责任感。 I am serious and responsible in work, and have a sense of responsibility to the society and the people.
- (2) 懂得调查课题的一般常识。 I understand the general knowledge of the investigation topic
- (3) 能领悟调查的目的、要求、工作任务。 I can understand the purpose, requirements and work tasks of the investigation.
- (4) 懂得调查研究方法的基本知识。 I understand the basic knowledge of investigation and research methods,
- (5) 有一定的社交能力和语言文字表达能力。 I have certain social skills and language expression ability.
- (6) 有一定的统计和分析能力，能对自己所调查的资料进行初步加工、整理，并作出自己的判断和建议。 I have certain statistical and analytical ability, can conduct preliminary processing of their own investigation data, sorting, and make their own judgment and suggestions.

(7) 英语水平优秀，通过了国家的英语四级和六级的考试，为攻读博士的学习、问卷的翻译、论文的撰写等各项翻译提供了很好的保障条件。I have excellent English proficiency. I have passed the national CET-4 and CET-6, which provides a good guarantee condition for doctoral translation, questionnaire translation and paper writing.

(8) 具有很高的研究水平，发表论文多篇，主持课题多项。I have a very high level of research, published many papers, presided over a number of projects.



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APPENDIX B

QUESTIONNAIRE

This questionnaire is a part of the research of the Doctor of Philosophy Program in Industrial Business Administration (International Program), Faculty of KMITL Business School, at KMITL University. The data collected from this questionnaire will be treated with the utmost confidentiality. Kindly answer to the best of your knowledge. The questionnaire designed for this study will be divided into 6 parts:

Part 1: Questions on the demographic data

Part 2: Questions about the computer knowledge and internet experience

Part 3: Questions about the latent and observed variables of the UTAUT2 model from digital education platform perspective

Part 4: Questions about the teacher innovativeness

Part 5: Questions about Perceived Trust

Part 6: Questions about TPACK Ability

Part 7: Questions about uncertainty avoidance and individualism/collectivism dimension of culture from digital education platform perspective

Part 1: Demographic Data of the Respondents

Tick (✓) the option applicable for each of the questions listed below.

1) Gender:

Male Female Non-binary

2) Age

Under 20 years 21-30 years 31-40 years 41-50 years

51-60 years Older than 60 years

3) Experience

Under 5 years 5-20 years Higher than 20 years

4) Your lecture section is ()

Kindergarten Primary school Junior middle school Senior

High school

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5) Location of current residence

- East Central south North Northeast West north
 West south

6) Is every classroom equipped with multimedia teaching equipment

- Yes No

7) The number of office computers configured for teachers in the school is

- One set per person No one set per person()

Part 2: Questions about Computer Knowledge and Internet Experience of the Respondents

Tick (√) the option applicable for each of the questions listed below.

8) How do you describe your general computer knowledge?

- Very poor Poor Moderate Good Very Good

9) How would you describe your internet knowledge?

- Very poor Poor Moderate Good Very Good

10) How long have you been using the Internet?

- Don't use
 Less than 1 year
 1-3 years
 More than 3 years

11) How often do you use the Internet per day?

- Less than 1 hour
 1-2 hours
 2-3 hours
 More than 3 hours

Part 3: Questions on Latent and Observed Variables of the UTAUT2 model of the Respondents from digital education platform perspective.

Instruction: Please answer each of the following questions by ticking (√) in the blank spaces provided, that match your opinion, The scale is classified into five levels as follows(1 very disagree, 2 disagree, 3 general, 4 agree, 5 strongly agree):

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QUESTION	very disagree→very agree				
	1	2	3	4	5
Performance Expectation					
<u>Perceived usefulness</u>					
1)Using platform resource enables me to accomplish my learning activities more quickly.					
2)Using platform resource improves my learning performance (i.e., develop new skills, techniques, and gain experience).					
3)Using platform increases productivity in my learning activities(i.e.,able to learn and understand a large amount of information)					
4)Using platform enhances my effectiveness in my learning activities(i.e.,gain comprehensive knowledge and greater understanding about course being studied for improving grades and academic performance)					
5)Using platform would make it easier to compete my courses and modules faster.					
6)I would find platform resource useful in my learning activities.					
<u>Relative Advantage</u>					
7)Using platform resource enables me to learn more quickly as compared to traditional classroom.					
8)Using platform resource improves the quality of my learning activities(i.e., to achieve better grades and improve academic performance).					
9)Compared with the traditional learning, using the digital education platform resources can give me the freedom to learn.					
10)I am able to acquire information using platform for my learning activities.					
11)I am able to obtain the latest knowledge in education-related issues using platform.					
<u>Extrinsic Motivation</u>					
12)Using platform resource can increase wages.					
13)Using the platform resources can help to work.					
14)Using platform resources can increase opportunities for promotion.					
15)I am able to learn through interactive discussions from using platform.					
16)I am able to generate an environment of trust using platform.					
<u>Job-fit</u>					
17)The platform resources are close to my work field.					

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QUESTION	very disagree→very agree				
	1	2	3	4	5
18)Using platform resources can increase work output.					
19)Platform resources can be used in conjunction with textbooks and other resources.					
<u>Outcome Expectations</u>					
20)If I use platform resource I will increase the chances of getting higher marks on test and exams for the same amount of effort.					
21)If I use platform resource, my classmates will perceive me as competent.					
22)If I use platform resource, I will increase my chances of advancing to the next level.					
Efforts Expectation					
<u>Perceived Ease of Use</u>					
25)Learning to operate platform resource would be easy for me.					
26)I find platform resource to be flexible to interaction with.					
27)It is easy for me to become skillful at using platform resource.					
28)I feel confident in my ability to learn using platform.					
<u>Ease of Use</u>					
29)I believe I require little effort to understand how platform resource works.					
30)I often use the platform resources.					
31)Overall, I believe that the platform resource is easy to use.					
Social Influence					
<u>General Social Influence</u>					
32)People who influence my behavior think that I should use platform resource.					
33)People who are important to me think I should use platform resource.					
34)My school supports me to use the platform resources.					
<u>Peer Social Influence</u>					
35)Learner's who use platform resources enjoy more prestige than those who do not.					
36)Learner's who use platform resources enjoy higher profile than those who do not.					
37)My peers , leaders and teachers think that I should use platform resources.					
Facilitating Conditions					

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QUESTION	very disagree→very agree				
	1	2	3	4	5
<u>Perceived Behavioral Control</u>					
38)I have necessary to use the platform resources.					
39)I have the necessary knowledge to use platform systems.					
40)I have mastered the knowledge and skills to using platform resources.					
41)I have the knowledge necessary to use the platform resources.					
<u>Facilitating Conditions</u>					
42)Guidance is available to me in the selection of platform resources.					
43)It is necessary to guide me specifically on the use of digital platform resources.					
44)Specialized instruction concerning the platform was available to me.					
45)I can get the support from a specific person/group when I face difficulties with platform resources.					
46)Using platform fits my learning.					
<u>system compatibility with individuals</u>					
47)The resource content of the education platform is compatible with my research field.					
48)Even if I do not understand the teaching process of modern technology, but it does not affect my use.					
49)When I want to use technology to teach, I can immediately think of the content and technology of a certain platform resources.					
Hedonic Motivation					
<u>User Attention</u>					
50)Using platform resources to conduct teaching makes students more focused on class.					
51)Using platform resources to develop teaching enables students to better complete their learning tasks.					
52)Using platform to give students learning freedom.					
53)Using platform to make students communicate ideas regularly using platform.					
<u>User curiosity</u>					
54)Using platform to carry out teaching has made me more curious to explore the knowledge of various disciplines.					
55)Using platform to conduct teaching enables students to answer questions more actively.					
56)Using platform to develop teaching can activate the					

QUESTION	very disagree→very agree				
	1	2	3	4	5
classroom atmosphere.					
<u>User Enjoyment</u>					
58)It is interesting to use platform for teaching.					
59)Using platform is enjoyable.					
60)I am very satisfied with the use of platform for teaching.					
Intention To Use					
<u>Intention to use</u>					
61)I intent to use platform immediately.					
62)I look forward to popularizing the use of platform.					
63)I intend to use platform in the future learning sessions.					
64)I would recommend others and my colleagues to use the platform in their teaching.					
65)If the resources of platforms become more diversified in the future, I plan to use it often in the future.					
<u>Prediction to use</u>					
66)I predict I will use platform in the future.					
67)I predict I would use platform.					
68)If the resources of platforms become more diversified in the future, I predict that I will use them more often in the future.					
<u>Planning to use</u>					
69)I plan to use platform in the future.					
70)I plan to use platform in future learning sessions.					
71)I plan to continue to use the platform for various purposes in the future.					
Behavior To Use					
<u>Using experience</u>					
72)I must use the platform for learning and teaching.					
73)I have a lot of experience in using the platform.					
74)I use the platform, which has become a habit.					
<u>Using reaction</u>					
75)I am willing to recommend a platform that is worth to my friends on the on my favourite platform.					
76)I plan to continue to use the platform frequently.					
77)I will continue to use the platform.					

Part 3: Questions about the Teacher Innovativeness of the Respondents

Instruction: Please answer each of the following questions by ticking (√) in the blank

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spaces provided, that match your opinion, The scale is classified into five levels as follows(1 very disagree, 2 disagree, 3 general, 4 agree, 5 strongly agree):

Teacher Innovativeness	very disagree→very agree				
	1	2	3	4	5
<u>Innate Innovativeness</u>					
78)I am more interested in using the new technologies and new products of platform.					
79)I like to use platform for new technologies and new products.					
80)I'm excited to use new technologies and products from platforms.					
81)I have good study habits and time management using platform.					
82)I have a great sense of personal responsibility for using platform.					
83)I show initiative and judgment in carrying out my learning activities when using platform.					
<u>Domain Specific Innovativeness</u>					
84)Anyway, I really like to accept new things.					
85)About platform, I know more about the latest education and teaching technology platform resources than others.					
86)When I listen to the latest technical resources in education, I will be the first to learn more information.					

Part 4: Questions about Perceived Trust

Instruction: Please answer each of the following questions by ticking (√) in the blank spaces provided, that match your opinion, The scale is classified into five levels as follows(1 very disagree, 2 disagree, 3 general, 4 agree, 5 strongly agree):

Perceived Trust	very disagree→very agree				
	1	2	3	4	5
<u>System Quality</u>					
87)Now the platform start speed, running speed is very fast.					
88)The operation of the current platform is very smooth.					
89)Now the platform registration and login is very convenient.					
90)Now the platform downloads smoothly, no flash back, no response error.					

Perceived Trust	very disagree→very agree				
	1	2	3	4	5
91)In general, the system experience of platform is very good.					
<u>Relationship Quality</u>					
92)I can ask teachers' questions and get answers in time on the platform currently used.					
93)I can exchange my learning experience with my classmates on the platform currently used.					
94)On the platform currently in use, I think I am very familiar with my classmates.					
<u>Service quality</u>					
95)I think the platform content and information is reasonably priced.					
96)Compared with the time and energy I need to invest, I still think the use of platform is very valuable.					
97)Overall, I am very satisfied with and trust the platform.					

Part 5: Questions about TPACK Ability

Instruction: Please answer each of the following questions by ticking (√) in the blank spaces provided, that match your opinion, The scale is classified into five levels as follows(1 very disagree, 2 disagree, 3 general, 4 agree, 5 strongly agree):

TPACK Ability	very disagree→very agree				
	1	2	3	4	5
<u>Technological Pedagogical knowledge</u>					
98)I was able to use platform student assessments to adjust the teaching.					
99)I was able to use platform resource to create valid content statements out of the textbook.					
100)My ability can meet the overall needs of contemporary platform resource teaching.					
<u>Technological Content knowledge</u>					
101)I was able to use platform resource to predict the student's skills or understanding of a particular topic.					
102)I was able to build an platform resource learning environment that helped students build new knowledge and technology.					
103)I can use platform resource to improve the degree of students' knowledge (for example, preview the online courseware content in advance, etc.).					

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TPACK Ability	very disagree→very agree				
	1	2	3	4	5
<u>Technological Pedagogical Content knowledge</u>					
104)I can select platform resource to use in my classroom that enhance what I teach, how I teach, and what students learn.					
105)I can teach lessons that appropriately combine my teaching subject, technologies, and teaching approaches.					
106)I can provide leadership in helping others to coordinate the use of content, technologies, and teaching approaches at my school and/or district.					

Part 6: Questions about uncertainty avoidance and individualism/collectivism dimension of culture from digital education platform perspective

Instruction: Please answer each of the following questions by ticking (√) in the blank spaces provided, that match your opinion, The scale is classified into five levels as follows(1 very disagree, 2 disagree, 3 general, 4 agree, 5 strongly agree):

Culture	very disagree→very agree				
	1	2	3	4	5
<u>Individualism/ Collectivism</u>					
107)I get better learning results when I study as a platform group member than when I study independently on my own.					
108)When group uses the platform, I am willing to abandon some personal interests to get benefits.					
109)When group uses the platform, I am willing to abandon some personal target to get the goal.					
<u>Uncertainty Avoidance</u>					
110)Studying platform,rules,and regulations are important because they inform me what is expected of me					
111)Studying the order and structure of platform learning modules important.					
112)It is important to follow platform instructions and procedures closely.					
113)Standardized work procedures are helpful when studying with platform.					

调查问卷

本问卷是 KMITL 商学院工商管理哲学博士项目(国际项目)研究的一部分。从本问卷中收集的数据将被严格保密。请尽你所能地回答你的问题。为本研究设计的调查问卷将分为 7 个部分:

第一部分: 关于人口统计学数据的问题

第二部分: 关于计算机知识和互联网经验的问题

第三部分: 从数字教育平台的角度探讨 UTAUT2 模型的潜在变量和观察变量的问题

第四部分: 关于教师创新性的问题

第五部分: 关于感知信任的问题

第六部分: 关于 TPACK 能力的问题

第七部分: 从数字教育平台视角出发的不确定性回避和文化个人主义/集体主义维度问题

第一部分: 受访者的口统计数据

点击(√)的选项适用于下面列出的每个问题。

1) 你的性别:

男 女 既不是男也不是女

2) 你的年龄:

20 岁以下 21-30 岁 31-40 岁 41-50 岁

51-60 岁 大于 60 岁

3) 工作经验:

5 年以下 5-20 年 20 年以上以上

4) 你所在的单位是:

幼儿园 小学 初中 高中

5) 单位所在位置:

东 中南 北 东北 西北 西南

6) 你的单位每个教室是否都配备了多媒体教学设备

是的 不是

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7) 学校为每个教师配置一台电脑

() 是的 () 不是

第二部分：受访者关于计算机知识和互联网经验的问题

点击 (√) 的选项适用于下面列出的每个问题。

8) 请你描述你的计算机知识水平

() 很差 () 差 () 中等 () 好 () 很好

9) 请你描述你的互联网知识水平

() 很差 () 差 () 中等 () 好 () 很好

10) 你使用互联网有多久了

() 没有使用 () 不足1年 () 1-3年 () 多于3年

11) 你每天上网时间

() 不到1小时 () 1-2小时 () 2-3小时 () 多于3小时

第三部分：从数字教育平台的视角探讨受访者 UTAUT2 模型的潜在变量和观察变量的问题。

说明：请在提供的空白空间中勾选 (√) 回答以下每个问题，以符合您的意见，量表分为以下五个级别（1 代表非常不同意，2 代表不同意，3 代表一般，4 代表同意，5 代表非常同意）：

问题	非常不同意→非常同意				
	1	2	3	4	5
绩效期望					
感知有用性					
1)使用平台资源，使我能够更快地完成我的学习活动。					
2)使用平台资源可以提高我的学习性能（例如，发展新的技能、技术和获得经验）。					
3)使用平台可以提高我的学习活动的工作效率（即，能够学习和理解大量的信息）					
4)使用平台可以提高我在学习活动中的效率（即，获得全面的知识和进一步了解正在学习的课程，以提高成绩和学习成绩）					
5)使用平台将使我更容易竞争我的课程和模块更快。					
6)我会发现平台资源在我的学习活动中很有用。					
相对利益					
7)与传统课堂相比，使用平台资源可以使我学习得更快。					

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问题	非常不同意→非常同意				
	1	2	3	4	5
8)使用平台资源可以提高我的学习活动的质量（即，获得更好的成绩和提高学习成绩）。					
9)与传统的学习相比，使用数字教育平台的资源可以给我学习的自由。					
10)我能够通过使用平台获取关于我的学习活动的信息。					
11)我能够通过使用平台获得有关教育相关问题的最新知识。					
外部动机					
12)使用平台资源可以提高工资。					
13)使用该平台资源可以帮助您开展工作。					
14)使用平台资源可以增加晋升的机会。					
15)我能够通过使用平台进行互动讨论来学习。					
16)我能够使用平台创建一个信任的环境。					
工作适配					
17)平台资源非常接近我的工作领域。					
18)使用平台资源可以增加工作输出。					
19)平台资源可以与教科书和其他资源结合使用。					
结果预期					
20)如果我使用平台资源，我将以同样的努力增加在考试中获得更高分数的机会。					
21)如果我使用平台资源，我的同学们就会认为我是称职的。					
22)如果我使用平台资源，会增加我进入下一个水平的机会。					
23)我能够通过使用平台吸收研究和教育相关问题。					
24)我能够通过使用平台来分享重要知识。					
努力期望					
感知易用性					
25)学习平台资源的操作对我来说会很容易。					
26)我发现平台资源可以灵活交流。					
27)我很容易就熟练地使用平台资源。					
28)我对自己学习使用平台的能力充满信心。					
易用性					
29)我相信我不需要多少努力就能了解平台资源是如何工作的。					
30)我经常使用平台资源。					
31)总的来说，我相信这个平台资源很容易使用。					
社会影响					
一般社会影响					
32)那些影响我的行为的人认为我应该使用平台资源。					
33)那些对我很重要的人认为我应该提供平台资源。					

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问题	非常不同意→非常同意				
	1	2	3	4	5
34)我的学校支持我使用这个平台的资源。					
同伴社会影响					
35)使用平台资源的学习者比不使用平台资源的学习者享有更多的声望。					
36)使用平台资源的学习者比不使用的人知名度更高。					
37)我的同行、领导和老师都认为我应该使用平台资源。					
促进条件					
感知行为控制					
38)我有必要使用这些平台的资源。					
39)我有使用平台系统的必要知识。					
40)我已经掌握了使用平台资源的知识和技能。					
41)我有使用平台资源所需的知识。					
促进条件					
42)对于我来说在选择平台资源方面获得指导很有必要。					
43)有必要具体指导我如何使用数字平台资源。					
44)我可以得到关于这个平台的专门指导。					
45)当我在平台资源方面遇到困难时，我可以从一个特定的人/组中获得支持。					
46)使用平台符合我的学习。					
系统与个人兼容性³					
47)该教育平台的资源内容与我的研究领域相兼容。					
48)即使我不懂现代技术的教学过程，但它也不影响我的使用。					
49)当我想用技术来教学时，我能立即想到某个平台资源的内容和技术。					
享乐动机					
用户关注度					
50)使用平台资源教学，使学生在课堂上的注意力更集中。					
51)使用平台资源教学，使学生能够更好地完成学习任务。					
52)使用平台，让学生自由的学习。					
53)使用平台，让学生定期通过平台交流想法。					
用户好奇心					
54)利用平台资源进行教学，让我更好奇地探索各学科的知识。					
55)利用平台资源进行教学，使学生能够更积极地回答问题。					
56)利用平台资源开发教学，可以激活课堂氛围。					
57)使用平台可以使学生更容易地分享知识。					
用户享受					

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问题	非常不同意→非常同意				
	1	2	3	4	5
58)使用平台进行教学是一件很有趣的事情。					
59)使用平台是令人愉快的。					
60)我对使用平台进行教学感到非常满意。					
使用意愿					
使用意图					
61)我打算立即使用平台。					
62)我期待着普及平台的使用。					
63)我打算在未来的学习课程中使用平台的资源。					
64)我建议其他人和我的同事在教学中使用平台。					
65)如果未来平台的资源变得更加多样化,我计划在未来经常使用它。					
使用预测					
66)我预测我将立即使用平台。					
67)我预测我会使用平台。					
68)如果未来平台的资源变得更加多样化,我预测将会更频繁地使用它们。					
计划使用					
69)我计划在将来使用平台。					
70)我计划在未来的学习课程中使用平台。					
71)我计划在将来继续使用平台。					
使用行为					
使用经验					
72)我必须使用平台来进行学习和教学。					
73)我有很多使用平台的经验。					
74)我经常使用平台,已经成为一种习惯。					
使用后的反应					
75)我很愿意推荐其他人和我的同事使用平台。					
76)我将继续频繁地使用这个平台。					
77)我将继续使用这个平台。					

第四部分：关于受访者的教师创新性的问题

说明：请在提供的空白空间中勾选（√）回答以下每个问题，以符合您的意见，量表分为以下五个级别（1 代表非常不同意，2 代表不同意，3 代表一般，4 代表同意，5 代表非常同意）：

教师创新	1	2	3	4	5
内在创新性					
78)我对使用平台的新技术和新产品更感兴趣。					
79)我喜欢使用平台来开发新技术和新产品。					
80)我很高兴能使用平台的新技术和新产品。					

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教师创新	1	2	3	4	5
81)我有良好的学习习惯和使用平台的时间管理。					
82)我对使用平台有很大的个人责任感。					
83)在使用平台时,我表现出了自己进行学习活动的主动性和判断力。					
领域的创新性					
84)不管怎样,我真的很喜欢接受新事物。					
85)关于平台,我对最新的教育和教学技术平台资源了解更多。					
86)当我听最新的教育技术资源时,我将第一个了解更多的信息。					

第五部分：关于感知信任的问题

说明：请在提供的空白空间中勾选（√）回答以下每个问题，以符合您的意见，量表分为以下五个级别（1代表非常不同意，2代表不同意，3代表一般，4代表同意，5代表非常同意）：

感知信任	1	2	3	4	5
系统质量					
87)现在平台启动速度,运行速度非常快。					
88)目前平台运行非常顺利。					
89)现在平台的注册和登录非常方便。					
90)现在平台下载顺利,没有闪回,没有响应错误。					
91)总的来说,平台的系统体验非常好。					
关系质量					
92)我可以在当前使用的平台上及时向老师提问,并能及时得到答案。					
93)我可以在目前使用的平台上与我的同学交流我的学习经验。					
94)在目前正在使用的平台上,我认为我和我的同学非常熟悉。					
功能质量					
95)我认为平台内容和信息定价合理。					
96)与我需要投入的时间和精力相比,我仍然认为使用平台是非常有价值的。					
97)以目前的价格,平台提供了一个很好的价值。					

第六部分：关于 TPACK 能力的问题

说明：请在提供的空白空间中勾选（√）回答以下每个问题，以符合您的意见，量表分为以下五个级别（1代表非常不同意，2代表不同意，3代表一般，4代表同意，5代表非常同意）：

4 代表同意，5 代表非常同意）：

TPACK 能力	1	2	3	4	5
技术教学知识					
98)能够使用平台的学生评估来调整教学方式。					
99)我能够使用平台资源从教科书中创建有效的内容陈述。					
100)我的能力可以满足当代网络教学的整体需求。					
技术内容知识					
101)我能够用平台资源来预测学生的技能或对一个特定主题的理解。					
102)我能够建立一个在线学习环境，帮助学生建立新的知识和技术。					
103)我可以利用平台来提高学生的知识程度（例如，提前预览在线课件的内容等）。					
技术教学内容知识					
104)我可以选择在我的课堂上使用的平台资源来提高我的教学，教学方式和学生学习的内容。					
105)我可以教授一些适当地结合我的教学主题、技术和教学方法的课程。					
106)我可以提供领导能力，帮助他人协调在我的学校和/或地区的内容、技术和教学方法的使用。					

第七部分：从数字教育平台视角出发的不确定性回避和文化个人主义/集体主义维度问题

说明：请在提供的空白空间中勾选（√）回答以下每个问题，以符合您的意见，量表分为以下五个级别（1 代表非常不同意，2 代表不同意，3 代表一般，4 代表同意，5 代表非常同意）：

文化	1	2	3	4	5
个人集体主义					
107)当我作为一个平台的小组成员时，我比独立学习时获得更好的学习结果。					
108)在使用平台时，群体的成功比个人的更重要。					
109)在使用平台时，即使个人目标受到影响，也应该鼓励群体忠诚度。					
不确定性规避					
110)学习平台、规则和规章制度很重要，因为它们能告诉我人们对我的期望。					
111)研究平台学习模块的顺序和结构十分重要。					
112)密切遵循平台的指导方针和程序是很重要的。					

文化	1	2	3	4	5
113) 标准化的工作程序对使用平台进行学习是有帮助的。					



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APPENDIX C

INSTRUMENT VALIDITY

AND RELIABILITY ASSESSMENT THE INDEX OF CONGRUENCE (IOC)

To evaluate the validity of the instruments, the Item of Congruence (IOC) was used. A team of 3 experts as academicians and executives, who have used digital education platform were asked to evaluate whether the questions were appropriate, and whether any improvements were important. In addition to this evaluation, there were the instrument calculation for the IOC between each question and variables. The questions, which had an IOC greater than 0.05 was considered appropriate. $IOC = \frac{\sum R}{N}$

Where:

R= Congruence value of each Question

N= the number of experts

1=Congruent

0=Uncertainty

-1 =Incongruent

The IOC ranges from -1 to +1. Hence, a question was considered good the closer it is to +1. The questions having an IOC, which is less than 0.6, were revised. Those with IOC less than 0.5 were excluded from the questionnaire (Turner & and Carlson, 2003). The range of IOC included:

+1 = the questions were found to be congruent with the content

0= the questions are uncertain if the questions would be congruent with the content-1= the questions are found to be incongruent with the content

The consideration criteria for the IOC was as follows:

1. Questions having IOC between 0.5-1.00= Valid and can be used.

2. Questions with IOC below 0.5 = To be revised To assure the consistency and validity

of the instrument, the questionnaire was assessed by there expert who has an abundance of This material is reserved for educational use only, not allowed for commercial use.

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knowledge and experience items of Information system and technology to consider and review whether all details were simple to comprehend and meet the points or not. They are Dr. Bilal Khalid, Dr. manoj chatpibal, Dr. Waranpong Boonsiritomachai. The results are presented below.

	Questions	Dr. Bilal Khalid	Dr. manoj chatpibal	Dr. Waranpong Boonsirito machai	Total	IOC Index
1	Using platform resource enables me to accomplish my learning activities more quickly.	1	1	1	3	1
2	Using platform resource improves my learning performance (i.e., develop new skills, techniques, and gain experience).	1	1	1	3	1
3	Using platform increases productivity in my learning activities(i.e.,able to learn and understand a large amount of information)	1	1	1	3	1
4	Using platform enhances my effectiveness in my learning activities(i.e.,gain comprehensive knowledge and greater understanding about course being studied for improving grades and academic performance)	1	1	1	3	1
5	Using platform would make it easier to compete my courses and modules faster.	1	1	1	3	1
6	I would find platform resource useful in my learning activities.	1	1	1	3	1
7	Using platform resource enables me to learn more quickly as compared to traditional classroom.	1	1	1	3	1
8	Using platform resource improves the quality of my learning activities(i.e., to achieve better grades and improve academic performance).	1	1	1	3	1
9	Compared with the traditional learning, using the digital education platform resources can give me the freedom to learn.	1	1	1	3	1
10	I am able to acquire information using platform for my learning activities.	1	1	1	3	1
11	I am able to obtain the latest knowledgein education-related issues using platform.	1	1	1	3	1
12	Using platform resource can increase wages.	1	1	1	3	1
13	Using the platform resources can help to work.	1	1	1	3	1

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14	Using platform resources can increase opportunities for promotion.	1	1	1	3	1
15	I am able to learn through interactive discussions from using platform.	1	1	1	3	1
16	I am able to generate an environment of trust using platform.	1	1	1	3	1
17	The platform resources are close to my work field.	1	1	1	3	1
18	Using platform resources can increase work output.	1	1	1	3	1
19	Platform resources can be used in conjunction with textbooks and other resources.	1	1	1	3	1
20	If I use platform resource I will increase the chances of getting higher marks on test and exams for the same amount of effort.	1	1	1	3	1
21	If I use platform resource, my classmates will perceive me as competent.	1	1	1	3	1
22	If I use platform resource, I will increase my chances of advancing to the next level.	1	1	1	3	1
23	I am able to assimilate research and education related issues using platform.	1	1	1	3	1
24	I am able to share important knowledge using platform.	1	1	1	3	1
25	Learning to operate platform resource would be easy for me.	1	1	1	3	1
26	I find platform resource to be flexible to interaction with.	1	1	1	3	1
27	It is easy for me to become skillful at using platform resource.	1	1	1	3	1
28	I feel confident in my ability to learn using platform.	1	1	1	3	1
29	I believe I require little effort to understand how platform resource works.	1	1	1	3	1
30	I often use the platform resources.	1	1	1	3	1
31	Overall, I believe that the platform resource is easy to use.	1	1	1	3	1
32	People who influence my behavior think that I should use platform resource.	1	1	1	3	1
33	People who are important to me think I should platform resource.	1	1	1	3	1
34	My school supports me to use the platform resources.	1	1	1	3	1
35	Learner's who use platform resources enjoy more prestige than those who do not.	1	1	1	3	1
36	Learner's who use platform resources enjoy higher profile than those who do not.	1	1	0	2	1
37	My peers , leaders and teachers think that I should use platform resources.	1	1	1	3	1
38	I have necessary to use the platform resources.	1	1	1	3	1

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39	I have the necessary knowledge to use platform systems.	1	1	1	3	1
40	I have mastered the knowledge and skills to using platform resources.	1	1	1	3	1
41	I have the knowledge necessary to use the platform resources.	1	1	1	3	1
42	Guidance is available to me in the selection of platform resources.	1	1	1	3	1
43	It is necessary to guide me specifically on the use of digital platform resources.	1	1	1	3	1
44	Specialized instruction concerning the platform was available to me.	1	1	1	3	1
45	I can get the support from a specific person/group when I face difficulties with platform resources.	1	1	1	3	1
46	Using platform fits my learning.	1	1	1	3	1
47	The resource content of the education platform is compatible with my research field.	1	1	1	3	1
48	Even if I do not understand the teaching process of modern technology, but it does not affect my use.	1	1	1	3	1
49	When I want to use technology to teach, I can immediately think of the content and technology of a certain platform resources.	1	1	1	3	1
50	Using platform resources to conduct teaching makes students more focused on class.	1	1	0	2	1
51	Using platform resources to develop teaching enables students to better complete their learning tasks.	1	1	1	3	1
52	Using platform to give students learning freedom.	1	1	1	3	1
53	Using platform to make students communicate ideas regularly using platform.	1	1	1	3	1
54	Using platform to carry out teaching has made me more curious to explore the knowledge of various disciplines.	1	1	1	3	1
55	Using platform to conduct teaching enables students to answer questions more actively.	1	1	1	3	1
56	Using platform to develop teaching can activate the classroom atmosphere.	1	1	1	3	1
57	Using platform make students easier to share knowledge.	1	1	1	3	1
58	It is interesting to use platform for teaching.	1	1	1	3	1
59	Using platform is enjoyable.	1	1	1	3	1
60	I am very satisfied with the use of platform for teaching.	1	1	1	3	1
61	I intent to use platform immediately.	1	1	1	3	1
62	I look forward to popularizing the use of platform.	1	1	1	3	1

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63	I intend to use platform in the future learning sessions.	1	1	1	3	1
64	I would recommend others and my colleagues to use the platform in their teaching.	1	1	1	3	1
65	If the resources of platforms become more diversified in the future, I plan to use it often in the future.	1	1	1	3	1
66	I predict I will use platform in the future.	1	1	0	2	1
67	I predict I would use platform.	1	1	0	2	1
68	If the resources of platforms become more diversified in the future, I predict that I will use them more often in the future.	1	1	1	3	1
69	I plan to use platform in the future.	1	1	1	3	1
70	I plan to use platform in future learning sessions.	1	1	1	3	1
71	I plan to continue to use the platform for various purposes in the future.	1	1	1	3	1
72	I must use the platform for learning and teaching.	1	1	1	3	1
73	I have a lot of experience in using the platform.	1	1	1	3	1
74	I use the platform , which has become a habit.	1	1	1	3	1
75	I am willing to recommend a platform that is worth to my friends on the on my favourite platform.	1	1	1	3	1
76	I plan to continue to use the platform frequently.	1	1	0	2	1
77	I will continue to use the platform.	1	1	1	3	1
78	I am more interested in using the new technologies and new products of platform.	1	1	1	3	1
79	I like to use platform for new technologies and new products.	1	1	1	3	1
80	I'm excited to use new technologies and products from platforms.	1	1	1	3	1
81	I have good study habits and time management using platform.	1	1	1	3	1
82	I have a great sense of personal responsibility for using platform.	1	1	1	3	1
83	I show initiative and judgment in carrying out my learning activities when using platform.	1	1	1	3	1
84	Anyway, I really like to accept new things.	1	1	1	3	1
85	About platform, I know more about the latest education and teaching technology platform resources than others.	1	1	1	3	1
86	When I listen to the latest technical resources in education, I will be the first to learn more information.	1	1	1	3	1
87	Now the platform start speed, running speed is very fast.	1	1	1	3	1

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88	The operation of the current platform is very smooth.	1	1	1	3	1
89	Now the platform registration and login is very convenient.	1	1	1	3	1
90	Now the platform downloads smoothly, no flash back, no response error.	1	1	1	3	1
91	In general, the system experience of platform is very good.	1	1	1	3	1
92	I can ask teachers' questions and get answers in time on the platform currently used.	1	1	1	3	1
93	I can exchange my learning experience with my classmates on the platform currently used.	1	1	1	3	1
94	On the platform currently in use, I think I am very familiar with my classmates.	1	1	1	3	1
95	I think the platform content and information is reasonably priced.	1	1	1	3	1
96	Compared with the time and energy I need to invest, I still think the use of platform is very valuable.	1	1	1	3	1
97	Overall, I am very satisfied with and trust the platform.	1	1	0	2	1
98	I was able to use platform student assessments to adjust the teaching.	1	1	1	3	1
99	I was able to use platform resource to create valid content statements out of the textbook.	1	1	1	3	1
100	My ability can meet the overall needs of contemporary platform resource teaching.	1	1	1	3	1
101	I was able to use platform resource to predict the student's skills or understanding of a particular topic.	1	1	1	3	1
102	I was able to build an platform resource learning environment that helped students build new knowledge and technology.	1	1	1	3	1
103	I can use platform resource to improve the degree of students' knowledge (for example, preview the online courseware content in advance, etc.).	1	1	1	3	1
104	I can select platform resource to use in my classroom that enhance what I teach, how I teach, and what students learn.	1	1	1	3	1
105	I can teach lessons that appropriately combine my teaching subject, technologies, and teaching approaches.	1	1	1	3	1
106	I can provide leadership in helping others to coordinate the use of content, technologies, and teaching approaches at my school and/or district.	1	1	1	3	1
107	I get better learning results when I study as a platform group member than when I study independently on my own.	1	1	1	3	1
108	When group uses the platform, I am willing to abandon some personal interests to get benefits.	1	1	0	2	1

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109	When group uses the platform, I am willing to abandon some personal target to get the goal.	1	1	0	2	1
110	Studying platform, rules, and regulations are important because they inform me what is expected of me	1	1	1	3	1
111	Studying the order and structure of platform learning modules important.	1	1	1	3	1
112	It is important to follow platform instructions and procedures closely.	1	1	1	3	1
113	Standardized work procedures are helpful when studying with platform.	1	1	1	3	1

THE RELIABILITY OF THE INSTRUMENT

To evaluate the reliability of the instrument, the Cronbach's alpha was calculated to evaluate the entire questionnaire. Cronbach's alpha greater than 0.7 was considered acceptable (Gliem & Gliem, 2003). Cronbach's alpha was evaluated using the following criteria.

Cronbach's Alpha	External Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: Gliem & Gliem, (2003)

The formula for developing the Cronbach's alpha is presented by (Gliem & Gliem, 2003). The coefficient of alpha ranges from 0 - 1 were, as presented in the above criteria. The higher the Cronbach's alpha, the better the reliability of the questions. The calculations are presented below:

$$a = \frac{K}{K-1} \left[1 - \frac{\sum S_i^2}{S_t^2} \right]$$

Where:

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a = Reliability coefficient

k = the number of questions of the instrument

S_i^2 = Variance of score in each question

S_t^2 = Variance of total score of all respondents

In the interpretation of results, the Cronbach's alpha coefficient would be considered acceptable if it is above 0.70. However, if it is below 0.7. it would be necessary to re-evaluate the questions of the questionnaire.

To check the accuracy and internal consistency of the instruments, two tests were conducted; first with a pilot study sample ($n = 30$) and the actual data for China, The researcher used SPSS version 26 to conduct Cronbach's tests, and the results were 0.923, which was above 0.70 (See table 3.18 below)The questionnaire, according to Cronbach (1951), was excellently reliable.

Table 3.18. Cronbach's Alpha from a Pilot Study($n=30$)

		n	%
Cases	Valid	30	100.0
	Excluded ^a	0	0
	Total	30	100.0

b. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.923	0.923	113

APPENDIX D

SKEWNESS AND KURTOSIS RESULTS

Skewness and Kurtosis results

	Skewness	Kurtosis
Mean Performance expectation	0.204	-1.029
Perceived usefulness 1	-0.445	-0.484
Perceived usefulness 2	-0.649	-0.761
Perceived usefulness 3	-0.503	-0.350
Perceived usefulness 4	-0.546	-0.266
Perceived usefulness 5	-0.365	-0.616
Perceived usefulness 6	-0.233	-0.358
Relative Advantage 1	-0.725	-0.685
Relative Advantage 2	-0.116	-0.788
Relative Advantage 3	-0.449	-0.637
Relative Advantage 4	-0.640	-0.305
Relative Advantage 5	-0.503	-0.275
Extrinsic Motivation 1	-0.503	-0.707
Extrinsic Motivation 2	-0.484	-0.715
Extrinsic Motivation 3	-0.495	-0.738
Extrinsic Motivation 4	-0.437	-0.252
Extrinsic Motivation 5	-0.699	-0.300
Job-fit 1	-0.608	-0.587
Job-fit 2	-0.382	-1.045
Job-fit 3	-0.621	-0.669
Outcome Expectations 1	-0.591	+0.282
Outcome Expectations 2	-0.309	-0.320
Outcome Expectations 3	-0.304	-0.321
Outcome Expectations 4	-0.631	-0.067

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	Skewness	Kurtosis
Outcome Expectations 5	-0.624	+0.150
Mean Efforts Expectation	-0.223	-0.855
Perceived Ease of Use 1	-0.389	-0.416
Perceived Ease of Use 2	-0.448	+0.426
Perceived Ease of Use 3	-0.706	-0.304
Perceived Ease of Use 4	-0.588	-0.137
Ease of Use 1	-0.255	-0.036
Ease of Use 2	-0.409	-0.300
Ease of Use 3	-0.539	-0.313
Mean Social Influence	-0.174	-0.912
General Social Influence 1	-0.590	+0.105
General Social Influence 2	-0.583	-0.210
General Social Influence 3	-0.545	+0.512
Peer Social Influence 1	-0.315	-0.112
Peer Social Influence 2	-0.488	-0.138
Peer Social Influence 3	-0.412	-0.346
Mean Facilitating Conditions	-0.168	-0.904
Perceived Behavioral Control 1	-0.664	-0.212
Perceived Behavioral Control 2	-0.620	-0.138
Perceived Behavioral Control 3	-0.620	+0.116
Perceived Behavioral Control 4	-0.446	+0.250
Facilitating Conditions 1	-0.388	-0.178
Facilitating Conditions 2	-0.564	-0.257
Facilitating Conditions 3	-0.713	-0.399
Facilitating Conditions 4	-0.649	-0.374
Facilitating Conditions 5	-0.648	-0.493
system compatibility with individuals 1	-0.507	+0.598
system compatibility with individuals 2	-0.281	+0.183

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	Skewness	Kurtosis
system compatibility with individuals 3	-0.332	+0.253
Mean Hedonic Motivation	-0.287	-1.046
User Attention 1	-0.534	-0.542
User Attention 2	-0.512	-0.646
User Attention 3	-0.533	-0.552
User Attention 4	-0.518	-0.658
User curiosity 1	-0.604	-0.543
User curiosity 2	-0.311	-0.654
User curiosity 3	-0.636	-0.580
User curiosity 4	-0.404	-1.026
User Enjoyment 1	-0.519	-0.852
User Enjoyment 2	-0.614	-0.741
User Enjoyment 3	-0.631	-0.808
Mean Intention To Use	-0.291	-0.942
Intention to use 1	-0.601	-0.035
Intention to use 2	-0.660	-0.172
Intention to use 3	-0.382	-0.361
Intention to use 4	-0.729	+0.374
Intention to use 5	-0.719	-0.365
Prediction to use 1	-0.501	-0.140
Prediction to use 2	-0.538	-0.106
Prediction to use 3	-0.457	-0.185
Planning to use 1	-0.576	-0.650
Planning to use 2	-0.709	+0.114
Planning to use 3	-0.382	-0.595
Mean Behavior To Use	-0.273	-0.757
Using experience 1	-0.535	-0.387
Using experience 2	-0.457	-0.097

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	Skewness	Kurtosis
Using experience 3	-0.447	-0.231
Using reaction 1	-0.588	+0.256
Using reaction 2	-0.690	-0.055
Using reaction 3	-0.668	-0.484
Mean Teacher Innovativeness	-0.210	-0.972
Innate Innovativeness 1	-0.466	-0.224
Innate Innovativeness 2	-0.472	-0.129
Innate Innovativeness 3	-0.619	+0.293
Innate Innovativeness 4	-0.642	-0.166
Innate Innovativeness 5	-0.531	-0.517
Innate Innovativeness 6	-0.448	-0.963
Domain Specific Innovativeness 1	-0.526	-0.354
Domain Specific Innovativeness 2	-0.539	-0.243
Domain Specific Innovativeness 3	-0.457	-0.685
Perceived Trust	-0.308	-1.021
System Quality 1	-0.439	-1.046
System Quality 2	-0.074	-0.682
System Quality 3	-0.728	-0.691
System Quality 4	-0.598	-0.394
System Quality 5	-0.452	-0.918
Relationship Quality 1	-0.518	-0.700
Relationship Quality 2	-0.486	-0.775
Relationship Quality 3	-0.522	-0.580
Service quality 1	-0.684	-0.465
Service quality 2	-0.370	-0.485
Service quality 3	-0.633	-0.442
Mean TPACK Ability	-0.246	-0.999
Technological Pedagogical knowledge 1	-0.729	-0.534

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	Skewness	Kurtosis
Technological Pedagogical knowledge 2	-0.687	+0.317
Technological Pedagogical knowledge 3	-0.390	-0.420
Technological Content knowledge 1	-0.663	-0.014
Technological Content knowledge 2	-0.637	+0.142
Technological Content knowledge 3	-0.292	-0.280
Technological Pedagogical Content knowledge 1	-0.226	-0.699
Technological Pedagogical Content knowledge 2	-0.466	-0.174
Technological Pedagogical Content knowledge 3	-0.501	-0.047
Mean Culture	-0.254	-0.865
Individualism/ Collectivism 1	-0.286	+0.129
Individualism/ Collectivism 2	-0.339	-0.308
Individualism/ Collectivism 3	-0.484	-0.370
Uncertainty Avoidance 1	-0.507	-0.807
Uncertainty Avoidance 2	-0.657	-0.121
Uncertainty Avoidance 3	-0.344	-0.563
Uncertainty Avoidance 4	-0.254	-0.517

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APPENDIX E

CFA ANALYSIS RESULTS

Notes for Group (Group number 1)

The model is recursive.

Sample size = 612

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

PUA

RAA

EMA

JFA

OEA

PEUA

EOUA

GSIA

PSIA

PBCA

FFA

SCIA

UAM

UCA

UEA

IIA

DSIA

SQA

SEQA

RQA

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TPKA

TCKA

TPCKA

ITUA

PTUA

PLTUA

UEXA

URA

Unobserved, exogenous variables

ITUE

BTU

PE

e1

e2

e3

e4

e5

EE

e6

e7

SI

e8

e9

FC

e10

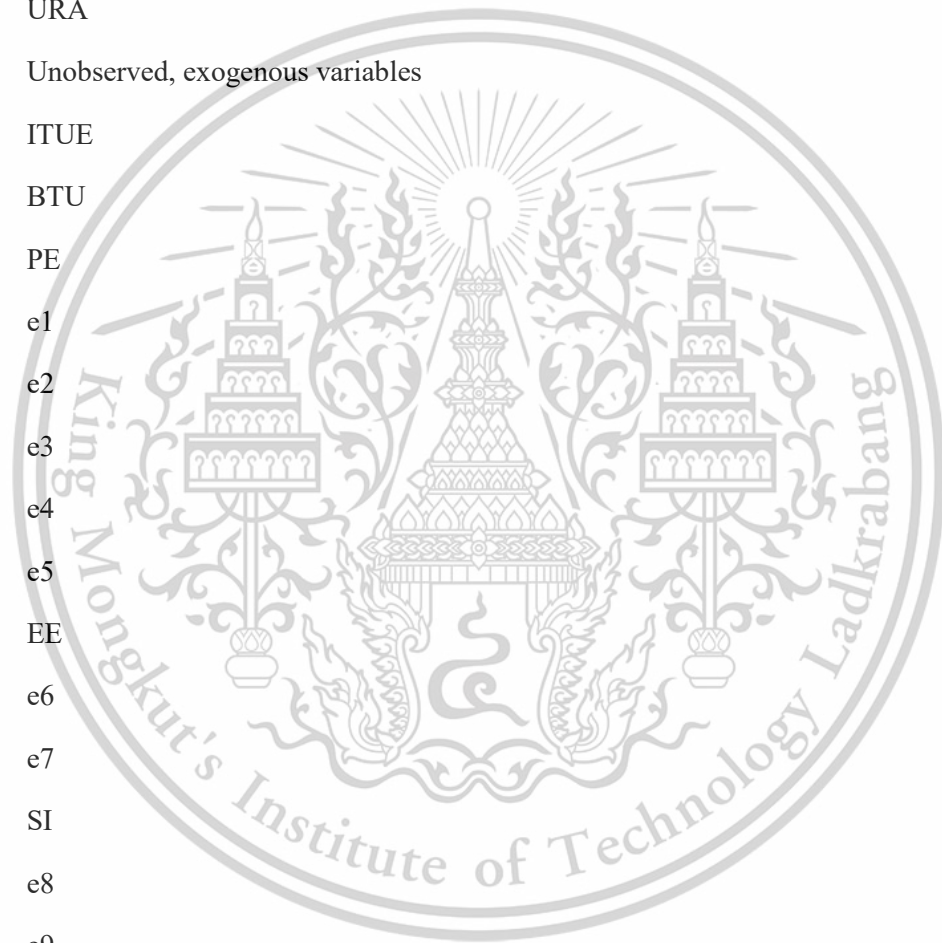
e11

e12

HM

e13

e14



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e15

TI

e16

e17

PT

e18

e19

e20

TPACK

e21

e22

e23

e24

e25

e26

e27

e28

Variable counts (Group number 1)

Number of variables in your model: 66

Number of observed variables: 28

Number of unobserved variables: 38

Number of exogenous variables: 38

Number of endogenous variables: 28

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 406

Number of distinct parameters to be estimated: 101

Degrees of freedom (406 - 101): 305

Result (Default model)

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Minimum was achieved

Chi-square = 404.974

Degrees of freedom = 305

Probability level = .000

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
PUA	<---	PE	1.000				
RAA	<---	PE	.927	.055	16.992	***	par_2
EMA	<---	PE	1.056	.059	17.776	***	par_3
JFA	<---	PE	1.055	.061	17.221	***	par_4
OEA	<---	PE	.912	.054	16.974	***	par_5
PEUA	<---	EE	1.000				
EOUA	<---	EE	.864	.102	8.464	***	par_6
GSIA	<---	SI	1.000				
PSIA	<---	SI	.933	.119	7.841	***	par_7
PBCA	<---	FC	1.000				
FFA	<---	FC	1.013	.069	14.654	***	par_8
SCIA	<---	FC	.863	.061	14.182	***	par_9
UAM	<---	HM	1.000				
UCA	<---	HM	.909	.057	16.086	***	par_10
UEA	<---	HM	1.016	.064	15.898	***	par_11
IIA	<---	TI	1.000				
DSIA	<---	TI	.805	.132	6.108	***	par_12
SQA	<---	PT	1.000				
SEQA	<---	PT	1.017	.066	15.483	***	par_13
RQA	<---	PT	.941	.060	15.580	***	par_14
TPKA	<---	TPACK	1.000				
TCKA	<---	TPACK	.853	.059	14.429	***	par_15
TPCKA	<---	TPACK	.773	.054	14.408	***	par_16
ITUA	<---	ITUE	1.000				
PTUA	<---	ITUE	1.027	.065	15.791	***	par_17
PLTUA	<---	ITUE	1.038	.063	16.352	***	par_18
UEXA	<---	BTU	1.000				

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			Estimate	S.E.	C.R.	P	Label
URA	<---	BTU	.865	.062	14.005	***	par_19

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
PUA	<---	PE	.756
RAA	<---	PE	.722
EMA	<---	PE	.755
JFA	<---	PE	.731
OEA	<---	PE	.721
PEUA	<---	EE	.801
EOUA	<---	EE	.669
GSIA	<---	SI	.769
PSIA	<---	SI	.722
PBCA	<---	FC	.706
FFA	<---	FC	.775
SCIA	<---	FC	.711
UAM	<---	HM	.780
UCA	<---	HM	.756
UEA	<---	HM	.737
IIA	<---	TI	.885
DSIA	<---	TI	.646
SQA	<---	PT	.775
SEQA	<---	PT	.733
RQA	<---	PT	.742
TPKA	<---	TPACK	.741
TCKA	<---	TPACK	.740
TPCKA	<---	TPACK	.735
ITUA	<---	ITUE	.735
PTUA	<---	ITUE	.713
PLTUA	<---	ITUE	.743
UEXA	<---	BTU	.743
URA	<---	BTU	.701

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
ITUE	<-->	BTU	.380	.036	10.449	***	par_1
PE	<-->	EE	.129	.026	4.958	***	par_20
PE	<-->	SI	.083	.025	3.288	.001	par_21
PE	<-->	FC	.072	.022	3.286	.001	par_22
PE	<-->	HM	.127	.028	4.530	***	par_23

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		Estimate	S. E.	C. R.	P	Label
PE	<--> TI	.072	.027	2.643	.008	par_24
PE	<--> PT	.059	.025	2.303	.021	par_25
PE	<--> TPACK	.057	.026	2.218	.027	par_26
ITUE	<--> TPACK	.112	.027	4.097	***	par_27
BTU	<--> TPACK	.074	.031	2.390	.017	par_28
EE	<--> SI	.111	.028	3.957	***	par_29
EE	<--> FC	.103	.024	4.218	***	par_30
EE	<--> HM	.146	.031	4.726	***	par_31
EE	<--> TI	.022	.030	.762	.446	par_32
EE	<--> PT	.034	.028	1.205	.228	par_33
EE	<--> TPACK	-.016	.028	-.569	.569	par_34
ITUE	<--> EE	.222	.029	7.570	***	par_35
BTU	<--> EE	.139	.031	4.522	***	par_36
SI	<--> HM	.138	.031	4.456	***	par_37
SI	<--> TI	.025	.029	.849	.396	par_38
SI	<--> PT	.039	.027	1.421	.155	par_39
SI	<--> TPACK	.013	.028	.453	.651	par_40
ITUE	<--> SI	.172	.028	6.072	***	par_41
BTU	<--> SI	.173	.032	5.441	***	par_42
FC	<--> HM	.127	.027	4.739	***	par_43
FC	<--> TI	.025	.025	.981	.326	par_44
FC	<--> PT	.023	.024	.962	.336	par_45
FC	<--> TPACK	.013	.024	.549	.583	par_46
ITUE	<--> FC	.187	.025	7.349	***	par_47
BTU	<--> FC	.258	.031	8.396	***	par_48
HM	<--> TI	-.011	.032	-.343	.732	par_49
HM	<--> PT	.037	.030	1.219	.223	par_50
HM	<--> TPACK	.012	.030	.382	.703	par_51
ITUE	<--> HM	.248	.032	7.818	***	par_52
BTU	<--> HM	.172	.034	5.105	***	par_53
TI	<--> PT	.160	.032	5.090	***	par_54
TI	<--> TPACK	.098	.031	3.157	.002	par_55
ITUE	<--> TI	.125	.029	4.383	***	par_56
BTU	<--> TI	.062	.032	1.932	.053	par_57
PT	<--> TPACK	.149	.030	4.907	***	par_58
ITUE	<--> PE	.200	.026	7.564	***	par_59
BTU	<--> PE	.161	.029	5.614	***	par_60
SI	<--> FC	.136	.025	5.331	***	par_61
ITUE	<--> PT	.156	.028	5.610	***	par_62

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	Estimate	S. E.	C. R.	P	Label
BTU <--> PT	.227	.033	6.836	***	par_63

Correlations: (Group number 1 - Default model)

	Estimate
ITUE <--> BTU	.762
PE <--> EE	.269
PE <--> SI	.175
PE <--> FC	.167
PE <--> HM	.231
PE <--> TI	.130
PE <--> PT	.114
PE <--> TPACK	.111
ITUE <--> TPACK	.221
BTU <--> TPACK	.133
EE <--> SI	.234
EE <--> FC	.238
EE <--> HM	.263
EE <--> TI	.040
EE <--> PT	.065
EE <--> TPACK	.031
ITUE <--> EE	.471
BTU <--> EE	.271
SI <--> HM	.252
SI <--> TI	.045
SI <--> PT	.077
SI <--> TPACK	.024
ITUE <--> SI	.372
BTU <--> SI	.343
FC <--> HM	.256
FC <--> TI	.050
FC <--> PT	.050
FC <--> TPACK	.028
ITUE <--> FC	.444
BTU <--> FC	.562
HM <--> TI	-.017
HM <--> PT	.062
HM <--> TPACK	.019
ITUE <--> HM	.461
BTU <--> HM	.293

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	Estimate
TI <--> PT	.269
TI <--> TPACK	.163
ITUE <--> TI	.232
BTU <--> TI	.105
PT <--> TPACK	.266
ITUE <--> PE	.430
BTU <--> PE	.316
SI <--> FC	.320
ITUE <--> PT	.309
BTU <--> PT	.412

Variances: (Group number 1 - Default model)

	Estimate	S. E.	C. R.	P	Label
ITUE	.456	.047	9.710	***	par_64
BTU	.545	.060	9.116	***	par_65
PE	.475	.046	10.317	***	par_66
EE	.486	.067	7.238	***	par_67
SI	.467	.070	6.674	***	par_68
FC	.387	.044	8.821	***	par_69
HM	.636	.063	10.119	***	par_70
TI	.640	.110	5.795	***	par_71
PT	.557	.056	9.951	***	par_72
TPACK	.560	.061	9.197	***	par_73
e1	.357	.026	13.617	***	par_74
e2	.376	.026	14.335	***	par_75
e3	.399	.029	13.626	***	par_76
e4	.460	.033	14.149	***	par_77
e5	.365	.025	14.349	***	par_78
e6	.272	.056	4.878	***	par_79
e7	.449	.048	9.442	***	par_80
e8	.322	.060	5.409	***	par_81
e9	.374	.054	6.971	***	par_82
e10	.390	.031	12.708	***	par_83
e11	.264	.026	10.272	***	par_84
e12	.282	.022	12.558	***	par_85
e13	.409	.038	10.667	***	par_86
e14	.395	.034	11.636	***	par_87
e15	.551	.045	12.283	***	par_88
e16	.177	.101	1.752	.080	par_89

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	Estimate	S. E.	C. R.	P	Label
e17	.580	.073	7.929	***	par_90
e18	.371	.035	10.646	***	par_91
e19	.497	.041	12.210	***	par_92
e20	.401	.034	11.875	***	par_93
e21	.461	.041	11.229	***	par_94
e22	.337	.030	11.249	***	par_95
e23	.284	.025	11.425	***	par_96
e24	.388	.029	13.238	***	par_97
e25	.465	.034	13.767	***	par_98
e26	.399	.031	13.027	***	par_99
e27	.442	.041	10.833	***	par_100
e28	.422	.034	12.415	***	par_101

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
URA	.491
UEXA	.552
PLTUA	.552
PTUA	.508
ITUA	.540
TPCKA	.541
TCKA	.548
TPKA	.548
RQA	.551
SEQA	.537
SQA	.600
DSIA	.417
IIA	.783
UEA	.544
UCA	.571
UAM	.609
SCIA	.505
FFA	.601
PBCA	.498
PSIA	.521
GSIA	.592
EOUA	.447
PEUA	.641
OEA	.520
JFA	.535

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	Estimate
EMA	.570
RAA	.521
PUA	.571

Matrices (Group number 1 - Default model)

Implied Covariances (Group number 1 - Default model)

	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	T CTPK K A	R Q A	SE QA	S Q A	DSIA	IIA	UEA	UCA	UA M	SC IA	FFA	PB CA	PSI A	GS IA	EO UA	PE UA	OE A	J A	
UR A	. 8 2 9																								
UE XA	. 4 7 1	. 9 8 6																							
PL TU A	. 3 4 1	. 3 9 4	. 8 9 1																						
PT UA	. 3 3 7	. 3 9 0	. 4 8 6	. 9 4 6																					
IT UA	. 3 2 9	. 3 8 0	. 4 7 3	. 4 6 8	. 8 4 4																				
TP CK A	. 0 4 9	. 0 5 7	. 0 9 0	. 0 8 9	. 0 8 9	. 0 8 6	. 6 1 9																		
TC KA	. 0 5 4	. 0 6 3	. 0 9 9	. 0 9 8	. 0 9 5	. 0 9 8	. 3 6 5	. 7 4 9																	
TP KA	. 0 6	. 0 7	. 1 1	. 1 1	. 1 1	. 4 3	. 4 7	. 4 0	1																

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	T CTPK A	R Q A	SE QA	S Q A	DSIA	IIA	UEA	UCA	UA M	SC IA	FFA	PB CA	PSI A	GS IA	EO UA	PE UA	OE A	J A	
	4	4	6	5	2	3	8	2																	
								1																	
RQ	1	2	1	1	1	1	1	1	1	8															
A	8	1	5	5	4	0	1	4	9																
	5	4	2	1	7	8	9	0	4																
										1															
SE	2	2	1	1	1	1	1	1	5																
QA	0	3	6	6	5	1	2	5	3	7															
	0	1	5	3	9	7	9	1	3	4															
SQ	1	2	1	1	1	1	1	1	5	5	.92														
A	9	2	6	6	5	1	2	4	2	6	8														
	6	7	2	0	6	5	7	9	4	7															
DS	0	0	1	1	1	0	0	0	1	1	.12														
IA	4	5	0	0	0	6	6	7	2	3	9	.995													
	3	0	5	4	1	1	7	9	2	1															
II	0	0	1	1	1	0	0	0	1	1	.16														
A	5	6	3	2	2	7	8	9	5	6	0	.515													
	4	2	0	9	5	6	3	8	1	3															
UE	1	1	2	2	2	0	0	0	0	0	.03	-.00													
A	5	7	6	5	5	0	1	1	3	3	7	9	-.011												
	1	5	2	9	2	9	0	2	5	8															
UC	1	1	2	2	2	0	0	0	0	0	.03	-.00													
A	3	5	3	3	2	0	0	1	3	3	3	8	-.010												
	5	7	4	2	6	8	9	1	2	4															
UA	1	1	2	2	2	0	0	0	0	0	.03	-.00													
M	4	7	5	5	4	0	1	1	3	3	7	9	-.011												
	9	2	8	5	8	9	0	2	5	7															
SC	1	2	1	1	1	0	0	0	0	0	.02	.017													
IA	9	2	6	6	6	0	1	1	1	2	0	.021													

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	T CTPK A	R Q A	SE QA	S Q A	DSIA	IIA	UEA	UCA	UA M	SC IA	FFA	PB CA	PSI A	GS IA	EO UA	PE UA	OE A	J A	
		3	3	7	5	1	9	0	1	9	0						0	0							
								
FF	2	2	1	1	1	0	0	0	0	0	.02					1	3	.6							
A	2	6	9	9	8	1	1	1	2	2	3	.020	.025	.1	.1	1	3	61							
	6	1	6	4	9	0	1	3	2	4				31	17	2	3	9	8						
							
PB	2	2	1	1	1	0	0	0	0	0	.02					1	3	.3	.7						
CA	2	5	9	9	8	1	1	1	2	2	3	.020	.025	.1	.1	1	3	92	7						
	3	8	4	2	7	0	1	3	2	3				29	16	2	3	7	7						
							
PS	1	1	1	1	1	0	0	0	0	0	.03					1	1	.1	1	7					
IA	4	6	6	6	6	0	1	1	3	3	6	.019	.023	.1	.1	1	1	28	2	8					
	0	1	6	5	0	9	0	2	4	7				30	17	2	0	8	9	7	1				
							
GS	1	1	1	1	1	0	0	0	0	0	.03					1	1	.1	1	4	7				
IA	5	7	7	7	7	1	1	1	3	4	9	.020	.025	.1	.1	1	1	38	3	3	8				
	0	3	8	6	2	0	1	3	7	0				40	25	3	1	8	7	6	6	9			
							
EO	1	1	1	1	1	.	.	.	0	0	.02					1	1	1	0	.0	0	0	8		
UA	0	2	9	9	9	0	0	0	2	3	9	.016	.019	.1	.1	1	0	90	8	9	9	1			
	4	0	9	7	1	1	1	1	7	0				28	15	2	7	9	0	6	1				
							
PE	1	1	2	2	2	.	.	.	0	0	.03					1	1	1	1	4	7				
UA	2	3	3	2	2	0	0	0	3	3	4	.018	.022	.1	.1	1	0	05	0	0	1	2	5		
	1	9	0	8	2	1	1	1	2	4				49	33	4	8	6	9	3	4	1	0	8	
							
OE	1	1	1	1	1	0	0	0	0	0	.05					1	0	.0	0	0	0	1	1		
A	2	4	8	8	8	4	4	5	5	5	4	.053	.065	.1	.1	1	0	66	6	7	7	0	1		
	7	6	9	7	2	0	4	2	0	4				17	05	1	5	6	6	5	0	5	2	8	
							
JF	1	1	2	2	2	0	0	0	0	0	.06					1	0	.0	0	0	0	1	1		
A	4	6	1	1	1	4	5	6	5	6	2	.061	.076	.1	.1	1	0	77	7	8	8	1	3		
	7	9	9	7	1	7	1	0	8	3				36	22	3	6	4	5	6	1	7	8	7	
							
EM	1	1	2	2	2	0	0	0	0	0	.06					1	0	.0	0	0	0	1	1		
A	4	7	1	1	1	4	5	6	5	6	2	.061	.076	.1	.1	1	0	77	7	8	8	1	3		
	7	0	9	7	1	7	1	0	8	3				36	22	3	6	4	5	6	1	7	8	7	

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	T CTPK A	R QA	SE QA	S QA	DSIA	IIA	UEA	UCA	UA M	SC IA	FFA	PB CA	PSI A	GS IA	EO UA	PE UA	OE A	J A	
RA	1	1	1	1	1	0	0	0	0	0	.05														
A	2	4	9	9	8	4	4	5	5	5	4	.053	.066	.19	.107	1	0	.067	0	0	0	0	1	1	
	9	9	2	0	5	1	5	3	1	5						7	7		6	1	7	4	0		
	1	1	2	2	2	0	0	0	0	0	.05														
UA	3	6	0	0	0	4	4	5	5	6	9	.058	.072	.129	.115	1	0	.073	0	0	0	0	1	1	
	9	1	8	5	0	4	9	7	5	0						7	2		2	7	3	2	9		

Implied Correlations (Group number 1 - Default model)

	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	T CTPK A	R QA	SE QA	S QA	IIA	UEA	UCA	UA M	SC IA	F CA	PB IA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PUA	
UR	1																										
A	0	1																									
UE	0	5	1																								
X	0	2	0	1																							
A	0	1	0	0	1																						
PL			3	4																							
T			9	2	0																						
U			7	1	0																						
A						1																					
PT				3	4	5																					
U				8	0	3																					
A				1	4	0																					
							1																				
IT					3	4	5	5																			
U					9	1	4	2	0																		
A					3	6	6	4	0																		
									0																		
TP										1																	

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	F F A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PUA	
CK A	0	0	1	1	1	.																							
	6	7	2	1	2	0																							
	9	3	1	6	0	0																							
						0																							
							1																						
																							
TC KA	0	0	1	1	1	5	.																						
	6	7	2	1	2	4	0																						
	9	3	2	7	0	4	0																						
							0																						
								1																					
																						
TP KA	0	0	1	1	1	5	5	.																					
	6	7	2	1	2	4	4	0																					
	9	3	2	7	0	5	8	0																					
							0																						
									1																				
																						
RQ A	2	2	1	1	1	1	1	1	.																				
	1	2	7	6	6	4	4	4	0																				
	4	7	1	4	9	5	6	6	0																				
							0																						
										1																			
																						
SE QA	2	2	1	1	1	1	1	5	.																				
	1	2	6	6	6	4	4	4	0																				
	2	4	8	2	7	3	4	4	0																				
							0																						
											1																		
																						
SQ A	2	2	1	1	1	1	1	5	5	.																			
	2	3	7	7	7	5	5	5	7	6	0																		
	4	7	8	1	6	2	2	3	5	8	0																		
											0																		
												1																	
																		
DS IA	0	0	1	1	1	0	0	0	1	1	1	.																	
	4	5	1	0	1	7	7	7	2	2	3	0																	
	8	1	1	7	0	8	8	8	9	7	4	0																	
												0																	
													1																
																		
II A	0	0	1	1	1	1	1	1	1	1	5	.																	
	6	6	5	4	5	0	0	0	7	7	8	7	0																
	5	9	2	6	1	6	7	7	7	4	4	1	0																
													0																

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SS AA	D II A	UE AA	UC AA	UA MA	SC IA	F FA	PB CA	PS IA	GS IA	EO UA	PE UA	OE AA	JF AA	EM AA	RA AA	PUA	
UE A	. 1	. 1	. 2	. 2	. 2	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
UC A	. 1	. 1	. 2	. 2	. 2	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
UA M	. 1	. 1	. 2	. 2	. 2	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
SC IA	. 2	. 2	. 2	. 2	. 2	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
FF A	. 3	. 3	. 2	. 2	. 2	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
PB CA	. 2	. 2	. 2	. 2	. 2	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
PS IA	. 1	. 1	. 2	. 1	. 1	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
GS IA	. 1	. 1	. 2	. 2	. 2	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SO A	S I A	II A	UE A	UC A	UA M	SC IA	F F A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PUA		
EO UA	1 2 7	1 3 5	2 3 4	2 2 4	2 3 1	0 1 5	0 1 5	0 1 5	0 3 2	0 3 2	0 3 3	0 1 7	0 2 4	0 3 0	1 3 3	1 3 7	1 1 3	1 2 3	1 1 2	1 1 3	1 1 2	1 1 3	1 1 2	1 1 3	1 1 2	1 1 3	1 1 2	0 0 0		
PE UA	1 5 2	1 6 1	2 8 0	2 6 9	2 7 7	0 1 8	0 1 8	0 1 8	0 3 8	0 4 8	0 2 0	0 2 1	0 2 9	0 5 6	1 5 9	1 6 5	1 3 6	1 4 8	1 3 5	1 3 5	1 3 4	1 3 4	1 3 4	1 3 4	1 3 4	1 3 4	1 3 4	1 3 4	0 0 0	
OE A	1 5 9	1 6 9	2 3 0	2 2 1	2 2 8	0 5 9	0 5 9	0 6 9	0 6 1	0 6 4	0 6 0	0 6 3	0 8 3	0 2 3	1 2 6	1 3 6	1 3 0	1 8 6	1 9 3	1 8 5	1 9 1	1 9 7	1 9 0	1 9 3	1 9 5	1 9 6	1 9 0	1 9 6	0 0 0	
JF A	1 6 2	1 7 2	2 3 3	2 2 4	2 3 1	0 6 0	0 6 0	0 6 2	0 6 1	0 6 5	0 6 1	0 8 4	0 2 4	0 2 4	1 2 7	1 3 2	1 3 2	1 8 7	1 9 5	1 8 6	1 9 3	1 9 2	1 9 8	1 9 2	1 9 8	1 9 2	1 9 8	1 9 2	1 9 8	0 0 0
EM A	1 6 7	1 7 7	2 4 1	2 3 1	2 3 8	0 6 2	0 6 2	0 6 4	0 6 3	0 6 7	0 6 3	0 8 7	0 3 7	0 2 8	1 2 2	1 3 6	1 3 0	1 8 9	1 9 8	1 9 9	1 9 0	1 9 3	1 9 6	1 9 3	1 9 6	1 9 2	1 9 8	1 9 2	1 9 8	0 0 0
RA A	1 6 0	1 6 9	2 3 0	2 2 1	2 2 8	0 5 9	0 5 9	0 6 1	0 6 4	0 6 0	0 6 3	0 8 3	0 2 3	0 2 6	1 2 3	1 3 6	1 3 0	1 8 6	1 9 3	1 9 5	1 9 1	1 9 7	1 9 0	1 9 3	1 9 6	1 9 2	1 9 8	1 9 2	1 9 8	0 0 0
U A	1 6 7	1 7 7	2 4 1	2 3 1	2 3 8	0 6 2	0 6 2	0 6 4	0 6 3	0 6 7	0 6 3	0 8 7	0 3 7	0 2 8	1 2 2	1 3 6	1 3 0	1 8 9	1 9 8	1 9 9	1 9 0	1 9 3	1 9 6	1 9 3	1 9 6	1 9 2	1 9 8	1 9 2	1 9 8	0 0 0

Residual Covariances (Group number 1 - Default model)

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A			
UR A	0 0 0																														
UE XA	0 0 0	0 0 0																													
PL TU A	0 2 1	0 0 6	0 0 0																												
PT UA	0 0 5	0 0 3	0 2 0	0 0 0																											
IT UA	0 0 2	0 0 1	0 2 3	0 0 7	0 0 0																										
TP CK A	0 1 2	0 0 8	0 1 6	0 3 2	0 0 8	0 0 0																									
TC KA	0 0 1	0 1 2	0 2 4	0 4 1	0 2 0	0 0 2	0 0 0																								
TP KA	0 1 2	0 0 1	0 2 2	0 0 4	0 0 9	0 0 8	0 0 1	0 0 1																							
RQ A	3 0 3	2 0 2	1 0 1	5 0 5	2 0 2	5 0 0	0 0 4	0 0 0																							

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A	
	7	5	1	9	0	1	9																						
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QA	1	0	0	2	2	0	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	2	4	3	3	2	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	2	1	5	2	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	8	0	5	9	2	0	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IA	2	0	0	5	2	0	0	2	3	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	8	2	6	7	7	6	2	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	9	2	9	4	7	6	4	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	1	1	1	8	1	4	0	3	2	4	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	2	8	1	1	4	0	3	4	5	7	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	1	1	2	0	1	0	1	0	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	8	9	8	8	7	2	5	5	1	6	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	1	1	0	0	1	1	1	0	1	3	0	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	3	9	2	3	4	4	9	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IA	0	0	2	0	2	0	0	0	0	0	0	5	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	4	3	1	1	1	0	2	2	1	3	1	1	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A			
	7	7					2	4	6	2	6			0	7																
			-	-	-																										
FF A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	2	0	1	3	1	2	0	0	0	4	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9	9	0	8	9	3	1	4	7	9	3	2	9	6	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PB CA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	1	1	0	1	3	3	0	3	4	4	0	3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	0	9	6	9	8	0	4	2	7	4	2	0	5	8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
PS IA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	3	1	2	1	3	1	1	2	1	1	2	1	3	0	3	0	1	3	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	3	9	8	3	4	7	8	0	6	1	8	0	5	0	2	0	0	0	0	0	0	0	0	0	0	0	
GS IA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	1	3	1	6	1	2	5	3	1	2	5	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	3	5	5	2	5	0	1	2	3	3	6	3	6	0	4	7	6	6	0	0	0	0	0	0	0	0	0	0	0	
EO UA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	6	1	0	3	0	1	0	3	1	0	3	0	2	6	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	5	1	1	1	4	1	0	4	4	8	3	0	4	8	0	1	6	3	3	3	1	0	0	0	0	0	0	0	0	0	
PE UA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	2	0	0	0	0	0	0	2	0	2	0	1	6	3	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	
	8	3	3	6	4	6	2	5	3	8	0	6	0	9	4	1	4	0	8	2	1	0	0	0	0	0	0	0	0	0	
OE A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	1	2	1	4	0	1	2	1	3	1	1	1	2	2	3	6	1	0	1	1	0	0	0	0	0	0	0	0	0	
	9	5	6	7	1	5	1	6	4	9	2	9	4	9	2	7	2	6	1	6	1	3	0	0	0	0	0	0	0	0	
JF A	0	1	0	0	3	0	2	0	0	0	0	1	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	
	4	0	4	4	3	3	9	2	2	3	1	6	1	3	3	0	1	8	7	0	3	0	1	1	0	0	0	0	0	0	

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
	4	0	7	3	1	3	7	6	2	3	1	9	0	8	8	3														
EM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	0	0	1	1	3	0	3	2	1	1	0	0	1	0	8	8	0	2	0	0	0	0	1	0	0	0	0	
	5	8	1	1	5	9	1	2	4	1	5	5	3	5	9	1	3	9	3	2	0	5	7	0	0	0	0	0	0	
RA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A	1	2	0	1	3	4	0	0	3	0	0	1	0	2	2	8	5	0	0	2	2	0	2	0	2	1	0	0	0	
	0	4	9	3	4	1	0	3	8	1	0	5	0	2	4	6	9	5	5	0	5	5	0	7	2	9	0	0	0	
PU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
A	1	3	0	6	3	0	1	3	0	6	1	2	1	0	1	8	0	2	0	1	0	0	0	0	1	2	3	0	0	
	9	7	9	9	7	9	0	6	5	6	6	0	3	8	4	1	6	4	2	0	4	0	6	0	0	0	0	0	0	

Standardized Residual Covariances (Group number 1 - Default model)

	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A	
UR	0																												
A	0																												
UE	0	0																											
X	0	0																											
A	0	0																											
PL	5	1	0																										
T	5	5	0																										
A	1	7	0																										
PT	1	7	4	0																									
U	2	3	7	0																									
A	6	5	3	0																									
IT					1	0																							
U	0	0	5	6	0																								

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A	
II A
UE A	4	2	4	.	2	1	0	7	5	9	.	2	.	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.
UC A	2	4	1	6	5	1	4	3	1	3	0	6	0	5	0	.	.	.	.	.	.	.	.	.	.	.	.	.
UA M	2	2	0	0	3	5	3	0	3	7	.	5	2	.	0	.	.	.	.	.	.	.	.	.	.	.	.	.
SC IA	5	5	8	1	7	0	4	1	8	6	5	7	3	5	3	6	0	
FF A	2	2	6	2	6	2	4	7	2	0	2	6	7	3	4	0	0	
PB CA	2	1	.	5	1	.	.	.	8	0	0	
PS IA	.	8	.	.	3	.	1	3	4	7	5	2	.	.	2	8	

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
	6	9	3	6	8	6	.	5	1	2	2	6	4	7	4	0	1	3	0	0										
	6	7	4	1	5	9	2	6	3	3	0	6	8	8	2	6	7	4	0	0										
	1		2	9		1	4						5	5			2	3	9											
							8																							
	-		-	-	1		-	1	-		-	1	-		-															

GS	7	3	9	4	8	5	6	3	9	3	6	5	0	1	8	0	6	5	1	0	0									
IA	8	7	9	1	3	1	4	8	0	2	6	1	8	4	5	7	6	4	3	0	0									
	3	0	5	9	4	7	8	9	1	1	0	7	2	7				1												
	1																													
	1	1													1	1														
EO	3	.	3	0	9	.	0	9	4	0	.	.	.	.	.	.	2	4	.	.	.	0	0					
UA	3	6	3	0	9	0	3	9	7	8	9	8	1	6	7	0	0	3	7	1	2	0								
	4	8	0	2	1	3	2	5	7	1	3	2	2	9	1	8	6	5	1	0	6	0								
	4	2	3	4	1	4	0	5	7	1	3	4	4	8	1	6														
	1																													
PE	1	.	.	.	.	2	0	.	.	.	.	7	.	4	.	.	.	.	.	.	.	3	0	0				
UA	1	6	0	1	1	2	5	1	0	7	0	4	0	7	3	6	2	3	8	3	4	0	0							
	6	5	7	6	2	4	7	3	9	6	1	4	1	7	9	7	6	3	8	9	6	0	0							
	9	8	4	9	2	4	7	6	0	6	3	4	3	5	8	4	4	3	3	6	6	0	0							
	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	1	-	3	-											
OE	2	4	7	4	2	4	1	3	.	.	.	3	5	.	8	5	.	.	.	.	5	3	1	0				
A	7	3	6	8	4	0	7	1	9	9	3	4	9	6	5	9	3	1	1	1	0	3	1	0						
	9	3	5	4	7	5	9	1	2	4	5	4	6	9	2	2	2	7	6	1	5	8	4	2	0					
	-																													
	1	.	1	1	.	1	.											2	3											
JF	.	2	.	.	8	.	8	.	.	.	.	3	.	.	.	.	6	.	.	.	.	2	0	.	.	.	.	.
A	1	3	0	1	7	0	4	0	0	7	0	9	4	3	9	1	9	4	7	7	7	3	0	3	0					
	9	8	3	6	1	3	6	8	6	7	1	0	2	2	6	6	1	3	9	4	9	4	3	4	7					
	0	1	5		5																									
	-																													
EM	.	4	0	.	1	.	3	6	.	.	0	.	4	1	1	2	0					
A	1	6	2	1	3	2	2	0	0	5	6	8	6	6	2	7	4	5	7	9	3	0	4	6	3	0				
	4	7	4	8	1	3	2	0	5	6	9	7	8	1	4	2	1	9	9	5	1	7	4	8	5	0				
	1																													
RA	-	.	.	-	.	-	.	1	-	-	.	-	-	.	-	.	-	1	.	.	-	.	-	.	-	.	-	.		

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
A	.3	.6	.2	.4	.9	.1	.1	.9	.1	.3	.5	.8	.2	.1	.1	.7	.5	.0												
	0	3	5	5	0	2	0	9	0	.	.	0	.	4	7	0	9	7	.	8	6	4	6	8	2	4	4	0		
	0	9	3	9	5	3	7	9	5	5	6	1	7	9	1	4	4	9	4	6	7	0	0	1	2	8	0			
	0			6	7	5	7	5	1	4	2						2	7			3	1	5							
									3	2	0							7												
	-	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	
PU
A	5	0	2	.	0	3	3	1	9	1	8	2	6	4	1	2	5	.	1	6	3	4	0	1	2	0	0	0	0	0
	6	0	4	8	5	2	1	5	9	6	5	7	8	3	0	7	6	8	9	6	0	2	1	7	4	5	7	0		
	9	3	0	7	1	4	9	3	6	4	2	5	1	1	6	2	6	8	3	1	8	0	1	5	1	5	9	0		
				6														8												

Factor Score Weights (Group number 1 - Default model)

	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
TP	-	-	
AC	0	0	0	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K	0	0	1	1	1	2	0	5	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	2	2	2	2	3	
	4	4	6	3	5	3	1	8	3	2	5	3	2	2	3	3	1	2	1	2	2	7	4	2	2	2	2	3		
PT	
	0	0	0	0	0	0	0	2	2	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	3	0	0	0	1	1	1	5	2	9	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
	4	7	7	6	7	5	4	2	3	1	1	8	2	1	1	1	1	3	9	1	1	1	2	1	1	1	1	1		
TI	-	-	
	0	0	0	0	0	0	0	0	0	0	1	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	0	1	1	1	0	0	0	1	1	1	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9	0	6	3	5	6	5	5	3	2	5	3	4	5	6	7	1	2	1	0	0	2	4	3	3	3	3	3		
HM	.	.	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	0	0	2	2	2	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	9	4	8	0	0	0	0	0	0	0	1	0	5	2	7	9	6	9	2	5	0	4	3	4	4	4		
	2	2				3	3	3	1	1	1	4	5																	
FC	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	0	0	0	0	0	.	.	.	.	.	.	.	.	0	0	0	0	2	3	2	0	0	0	.	.	.	.
	3	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	1	0	0	0	0	0	0			
	7	1	1	9	1	0	0	0	0	0	0	1	2	4	5	5	1	3	2	3	6	4	8	0	0	0	0			
						1	1	1	8	7	9												1	1	1	1	1			

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SI
	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	
	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	8	0	1	0	0	0	0	0	0	
	2	4	5	3	5	2	2	2	1	1	1	0	0	7	9	9	6	0	3	2	9	7	3	2	2	2	2	2	2	
	-	-				-	-	-	-	-	-	-	-																	
EE
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	
	0	0	3	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	6	0	0	0	0	0	0	
	6	6	7	1	6	1	0	8	1	1	1	1	6	5	6	7	7	9	6	9	1	2	3	7	7	8	7	8	8	
PE
	0	0	0	0	0	0	0	0	.	.	.	0	0	0	0	0	.	.	.	0	0	0	0	1	1	1	1	1	1	
	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	5	7	6	8	
	5	6	3	1	3	3	2	2	1	1	1	2	6	3	3	4	1	1	1	2	2	5	0	5	2	5	3	5	5	
BTU
	2	2	0	0	0	.	.	.	0	0	0	.	.	.	.	.	.	.	0	0	0	0	.	.	0	0	0	0	0
	4	6	8	7	8	0	0	0	3	3	4	0	0	0	0	0	5	7	4	1	1	0	0	0	0	0	0	0	0	
	0	5	7	4	6	0	0	0	9	4	4	0	2	0	0	0	6	0	7	5	9	5	0	7	6	7	6	7	7	
ITUE
	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	7	9	6	9	1	1	1	0	0	0	0	3	2	2	2	1	1	1	1	1	1	2	5	1	1	1	1	1	
	9	6	5	6	3	6	5	3	7	6	8	8	4	0	5	7	3	6	1	4	8	7	2	2	1	3	2	4	4	

Total Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
URA	.000	.000	.000	.000	.000	.000	.000	.000	.865	.000
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	1.00 0	.000
PLTU A	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.03 8
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.02 7
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.00 0
TPCK A	.773	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.853	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	1.00	.000	.000	.000	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
	0									
RQA	.000	.941	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	1.01 7	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	1.00 0	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.805	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	1.00 0	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	1.01 6	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.909	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	1.00 0	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.863	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	1.01 3	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.933	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.864	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.912	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	1.05 5	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	1.05 6	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.927	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
URA	.000	.000	.000	.000	.000	.000	.000	.000	.701	.000
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	.743	.000
PLTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.743
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.713
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.735

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	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
TPCKA	.735	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.740	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.741	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.742	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.733	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.775	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.646	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.885	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.737	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.756	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	.780	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.711	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	.775	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.706	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.722	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.769	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.669	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	.801	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.721	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	.731	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.755	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.722	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.756	.000	.000

Direct Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
URA	.000	.000	.000	.000	.000	.000	.000	.000	.865	.000
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	1.00 0	.000
PLTU A	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.03 8
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.02 7
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.00 0
TPCK A	.773	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.853	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	1.00 0	.000	.000	.000	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
RQA	.000	.941	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	1.01 7	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	1.00 0	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.805	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	1.00 0	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	1.01 6	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.909	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	1.00 0	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.863	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	1.01 3	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.933	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.864	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.912	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	1.05 5	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	1.05 6	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.927	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
URA	.000	.000	.000	.000	.000	.000	.000	.000	.701	.000
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	.743	.000
PLTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.743
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.713
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.735
TPCKA	.735	.000	.000	.000	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
TCKA	.740	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.741	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.742	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.733	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.775	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.646	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.885	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.737	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.756	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	.780	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.711	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	.775	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.706	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.722	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.769	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.669	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	.801	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.721	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	.731	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.755	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.722	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.756	.000	.000

Indirect Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
URA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PLTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
UAM	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
URA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PLTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	BTU	ITUE
JFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

	M. I.	Par Change
e28 <--> EE	5.856	.054
e27 <--> EE	4.942	-.053
e24 <--> SI	5.318	.049
e22 <--> SI	4.401	-.043
e22 <--> ITUE	5.265	.034
e19 <--> TPACK	4.043	.053
e18 <--> HM	8.724	-.070
e18 <--> ITUE	6.201	.040
e17 <--> e26	5.572	-.055
e17 <--> e18	4.998	.053
e15 <--> e25	7.650	-.070
e14 <--> FC	4.680	.040
e14 <--> EE	6.307	-.056
e14 <--> BTU	4.260	-.042
e14 <--> ITUE	6.238	.040
e14 <--> e18	9.275	-.065
e11 <--> TPACK	5.723	.049
e11 <--> PE	41.677	-.111
e10 <--> TPACK	6.235	-.057
e10 <--> EE	6.050	-.053
e10 <--> PE	41.276	.125
e10 <--> e14	4.396	.043
e10 <--> e13	5.909	-.052
e8 <--> e26	4.062	-.042
e8 <--> e24	9.102	.061
e7 <--> HM	6.035	-.061
e7 <--> e27	7.773	-.066
e7 <--> e24	4.313	.044
e6 <--> HM	4.015	.047
e6 <--> e13	8.485	.064

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		M. I.	Par Change
e5	<--> e27	4.625	-.044
e5	<--> e10	5.156	.042
e4	<--> e10	4.084	.042
e2	<--> e20	4.585	-.042
e1	<--> PT	4.034	.041
e1	<--> e25	9.349	-.061
e1	<--> e10	4.332	.039

Variiances: (Group number 1 - Default model)

	M.I	Par Change
.		

Regression Weights: (Group number 1 - Default model)

		M. I.	Par Change
URA	<--- EE	4.027	.099
URA	<--- EOUA	4.683	.071
UEXA	<--- EOUA	8.437	-.101
PTUA	<--- UEA	4.516	-.059
PTUA	<--- PUA	7.979	-.094
ITUA	<--- SI	4.675	.104
ITUA	<--- GSIA	8.586	.093
ITUA	<--- JFA	4.546	.060
TPCKA	<--- RQA	4.233	-.054
RQA	<--- PTUA	4.782	-.066
SQA	<--- PE	4.126	.093
SQA	<--- UCA	7.894	-.086
SQA	<--- OEA	4.346	.070
SQA	<--- RAA	6.650	.085
DSIA	<--- FC	5.694	.142
DSIA	<--- SCIA	5.738	.105
DSIA	<--- FFA	4.102	.082
UEA	<--- PTUA	6.876	-.092
UCA	<--- SQA	6.517	-.078
UCA	<--- PBCA	6.057	.082
UAM	<--- PEUA	5.212	.081
SCIA	<--- PEUA	4.024	.056
FFA	<--- PE	37.172	-.238
FFA	<--- OEA	25.338	-.144
FFA	<--- JFA	23.223	-.121
FFA	<--- EMA	20.535	-.117

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			M. I.	Par Change
FFA	<---	RAA	26.478	-.145
FFA	<---	PUA	28.576	-.146
PBCA	<---	PE	31.464	.248
PBCA	<---	OEA	27.054	.169
PBCA	<---	JFA	25.689	.144
PBCA	<---	EMA	19.435	.129
PBCA	<---	RAA	10.634	.104
PBCA	<---	PUA	26.647	.160
GSIA	<---	ITUA	4.068	.064
EOUA	<---	UAM	5.409	-.069
PEUA	<---	UAM	7.080	.075
OEA	<---	PBCA	4.493	.064
PUA	<---	PT	4.437	.084
PUA	<---	PTUA	4.660	-.059
PUA	<---	RQA	5.151	.064

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	101	404.974	305	.000	1.328
Saturated model	406	.000	0		
Independence model	28	5972.869	378	.000	15.801

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.027	.957	.942	.719
Saturated model	.000	1.000		
Independence model	.176	.456	.416	.425

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.932	.916	.982	.978	.982
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.807	.752	.792
Saturated model	.000	.000	.000

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Model	PRATIO	PNFI	PCFI
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	99.974	51.714	156.326
Saturated model	.000	.000	.000
Independence model	5594.869	5347.901	5848.254

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.663	.164	.085	.256
Saturated model	.000	.000	.000	.000
Independence model	9.776	9.157	8.753	9.572

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.023	.017	.029	1.000
Independence model	.156	.152	.159	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	606.974	617.040	1053.064	1154.064
Saturated model	812.000	852.460	2605.193	3011.193
Independence model	6028.869	6031.659	6152.537	6180.537

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	.993	.914	1.086	1.010
Saturated model	1.329	1.329	1.329	1.395
Independence model	9.867	9.463	10.282	9.872

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	524	552
Independence model	44	46

APPENDIX F

SEM ANALYSIS RESULTS

Notes for Group (Group number 1)

The model is recursive.

Sample size = 612

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

PUA

RAA

EMA

JFA

OEA

PEUA

EOUA

GSIA

PSIA

PBCA

FFA

SCIA

UAM

UCA

UEA

IIA

DSIA

SQA

SEQA

RQA

TPKA

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TCKA

TPCKA

ITUA

PTUA

PLTUA

UEXA

URA

Unobserved, endogenous variables

ITUE

BTU

Unobserved, exogenous variables

PE

e1

e2

e3

e4

e5

EE

e6

e7

SI

e8

e9

FC

e10

e11

e12

HM

e13

e14

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e15

TI

e16

e17

PT

e18

e19

e20

TPACK

e21

e22

e23

e24

e25

e26

e27

e28

e29

e30

Variable counts (Group number 1)

Number of variables in your model: 68

Number of observed variables: 28

Number of unobserved variables: 40

Number of exogenous variables: 38

Number of endogenous variables: 30

Parameter Summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	40	0	0	0	0	40

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	Weights	Covariances	Variances	Means	Intercepts	Total
Labeled	0	0	0	0	0	0
Unlabeled	29	4	38	0	0	71
Total	69	4	38	0	0	111

Assessment of normality (Group number 1)

Variable	min	max	skew	c. r.	kurtosis	c. r.
URA	1.000	5.000	-.456	-4.600	-.563	-2.844
UEXA	1.000	5.000	-.328	-3.316	-.679	-3.431
PLTUA	1.333	5.000	-.382	-3.859	-.893	-4.512
PTUA	1.000	5.000	-.297	-2.997	-.693	-3.499
ITUA	1.400	5.000	-.430	-4.338	-.753	-3.803
TPCKA	1.667	5.000	-.218	-2.205	-.841	-4.247
TCKA	1.333	5.000	-.339	-3.420	-.731	-3.693
TPKA	1.000	5.000	-.422	-4.263	-.722	-3.645
RQA	1.333	5.000	-.400	-4.045	-.793	-4.003
SEQA	1.000	5.000	-.378	-3.813	-.972	-4.909
SQA	1.400	5.000	-.372	-3.761	-1.129	-5.699
DSIA	1.000	5.000	-.360	-3.631	-.865	-4.370
IIA	1.500	5.000	-.260	-2.631	-.965	-4.874
UEA	1.000	5.000	-.413	-4.167	-1.068	-5.395
UCA	1.250	5.000	-.322	-3.256	-1.041	-5.257
UAM	1.000	5.000	-.372	-3.757	-.949	-4.791
SCIA	1.333	5.000	-.178	-1.801	-.466	-2.351
FFA	1.000	5.000	-.263	-2.659	-.777	-3.921
PBCA	1.250	5.000	-.354	-3.578	-.740	-3.735
PSIA	1.333	5.000	-.215	-2.172	-.832	-4.202
GSIA	1.000	5.000	-.314	-3.174	-.708	-3.575
EOUA	1.333	5.000	-.274	-2.771	-.685	-3.460
PEUA	1.250	5.000	-.427	-4.316	-.743	-3.751
OEA	1.000	5.000	-.236	-2.388	-.784	-3.958
JFA	1.000	5.000	-.401	-4.051	-.952	-4.809
EMA	1.200	5.000	-.358	-3.614	-1.038	-5.243
RAA	1.400	5.000	-.329	-3.327	-.951	-4.803
PUA	1.333	5.000	-.307	-3.099	-.980	-4.949
Multivariate					-1.978	-.597

Observations farthest from the centroid (Mahalanobis distance) (Group number 1)

Observation number	Mahalanobis d-squared	p1	p2
129	50.886	.005	.957

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Observation number	Mahalanobis d-squared	p1	p2
176	49.157	.008	.957
586	49.147	.008	.870
89	48.599	.009	.816
428	48.506	.009	.686
76	48.176	.010	.599
131	47.270	.013	.669
11	46.936	.014	.618
423	46.459	.016	.617
246	46.424	.016	.497
90	45.639	.019	.614
18	45.526	.020	.532
388	44.991	.022	.596
477	44.692	.024	.590
488	44.535	.025	.540
38	43.699	.030	.733
545	43.133	.034	.824
580	43.011	.035	.793
52	42.971	.035	.734
350	42.798	.036	.718
445	42.434	.039	.771
387	42.282	.041	.755
153	41.891	.044	.819
140	41.700	.046	.822
101	41.616	.047	.793
401	41.615	.047	.732
357	41.525	.048	.701
6	41.130	.052	.789
136	41.031	.053	.769
138	40.764	.056	.810
25	40.736	.057	.767
7	40.444	.060	.821
102	40.211	.063	.851
282	40.007	.066	.871
272	40.003	.066	.833
404	39.847	.068	.842
424	39.472	.074	.910
479	39.437	.074	.890
274	39.312	.076	.892
61	39.303	.076	.862

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Observation number	Mahalanobis d-squared	p1	p2
164	39.272	.077	.835
456	39.250	.077	.801
67	39.042	.080	.837
333	38.955	.082	.830
486	38.882	.083	.817
416	38.857	.083	.785
367	38.806	.084	.762
514	38.772	.085	.730
100	38.517	.089	.800
284	38.344	.092	.830
489	38.223	.094	.840
354	38.155	.096	.830
536	38.123	.096	.805
187	38.061	.097	.792
108	37.892	.100	.826
189	37.815	.102	.821
142	37.737	.103	.817
466	37.729	.104	.782
579	37.643	.105	.782
143	37.625	.106	.750
12	37.388	.111	.821
88	37.342	.112	.806
15	37.342	.112	.767
161	37.337	.112	.728
46	37.218	.114	.749
124	37.095	.117	.772
296	36.916	.121	.820
276	36.873	.122	.805
209	36.803	.123	.802
49	36.789	.124	.772
556	36.735	.125	.762
48	36.718	.125	.731
62	36.675	.126	.714
576	36.623	.127	.702
597	36.451	.131	.760
221	36.409	.132	.744
603	36.316	.135	.757
174	36.185	.138	.790
149	36.179	.138	.757

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Observation number	Mahalanobis d-squared	p1	p2
524	36.081	.141	.774
487	36.008	.142	.777
380	35.985	.143	.754
219	35.624	.152	.889
110	35.604	.153	.873
319	35.509	.156	.885
542	35.435	.158	.888
504	35.377	.159	.887
608	35.315	.161	.887
592	35.309	.161	.866
253	35.268	.162	.859
507	35.045	.169	.916
91	34.940	.172	.929
372	34.891	.173	.926
509	34.878	.173	.913
438	34.863	.174	.899
139	34.856	.174	.882
77	34.848	.174	.862
47	34.643	.180	.915
299	34.637	.181	.899
104	34.622	.181	.884

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 406

Number of distinct parameters to be

estimated: 71

Degrees of freedom (406 - 71): 335

Result (Default model)

Minimum was achieved

Chi-square = 575.800

Degrees of freedom = 335

Probability level = .000

Estimates (Group number 1 - Default model)

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Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S. E.	C. R.	P	Label
ITUE	<---	PE	.214	.042	5.104	***	par_19
ITUE	<---	EE	.262	.053	4.939	***	par_20
ITUE	<---	SI	.131	.047	2.791	.005	par_21
ITUE	<---	FC	.272	.052	5.215	***	par_22
ITUE	<---	HM	.221	.038	5.892	***	par_23
ITUE	<---	TI	.087	.047	1.845	.065	par_24
ITUE	<---	PT	.174	.038	4.583	***	par_25
ITUE	<---	TPACK	.116	.037	3.112	.002	par_26
BTU	<---	ITUE	.585	.068	8.650	***	par_27
BTU	<---	PT	.227	.045	5.016	***	par_28
BTU	<---	FC	.371	.062	6.027	***	par_29
PUA	<---	PE	1.000				
RAA	<---	PE	.928	.055	16.926	***	par_1
EMA	<---	PE	1.059	.060	17.738	***	par_2
JFA	<---	PE	1.059	.062	17.202	***	par_3
OEA	<---	PE	.911	.054	16.872	***	par_4
PEUA	<---	EE	1.000				
EOUA	<---	EE	.910	.125	7.256	***	par_5
GSIA	<---	SI	1.000				
PSIA	<---	SI	.890	.143	6.223	***	par_6
PBCA	<---	FC	1.000				
FFA	<---	FC	1.023	.071	14.394	***	par_7
SCIA	<---	FC	.858	.062	13.907	***	par_8
UAM	<---	HM	1.000				
UCA	<---	HM	.918	.058	15.781	***	par_9
UEA	<---	HM	1.031	.066	15.676	***	par_10
IIA	<---	TI	1.000				
DSIA	<---	TI	.687	.308	2.235	.025	par_11
SQA	<---	PT	1.000				
SEQA	<---	PT	1.005	.066	15.116	***	par_12
RQA	<---	PT	.943	.062	15.272	***	par_13
TPKA	<---	TPACK	1.000				
TCKA	<---	TPACK	.851	.060	14.188	***	par_14
TPCKA	<---	TPACK	.791	.056	14.220	***	par_15
ITUA	<---	ITUE	1.000				

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			Estimate	S. E.	C. R.	P	Label
PTUA	<---	ITUE	1.025	.073	13.987	***	par_16
PLTUA	<---	ITUE	1.035	.072	14.408	***	par_17
UEXA	<---	BTU	1.000				
URA	<---	BTU	.887	.071	12.483	***	par_18

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
ITUE	<---	PE	.236
ITUE	<---	EE	.284
ITUE	<---	SI	.147
ITUE	<---	FC	.268
ITUE	<---	HM	.281
ITUE	<---	TI	.120
ITUE	<---	PT	.209
ITUE	<---	TPACK	.139
BTU	<---	ITUE	.530
BTU	<---	PT	.247
BTU	<---	FC	.332
PUA	<---	PE	.754
RAA	<---	PE	.721
EMA	<---	PE	.756
JFA	<---	PE	.733
OEA	<---	PE	.719
PEUA	<---	EE	.779
EOUA	<---	EE	.685
GSIA	<---	SI	.787
PSIA	<---	SI	.703
PBCA	<---	FC	.701
FFA	<---	FC	.779
SCIA	<---	FC	.702
UAM	<---	HM	.774
UCA	<---	HM	.757
UEA	<---	HM	.743
IIA	<---	TI	.958
DSIA	<---	TI	.597
SQA	<---	PT	.777
SEQA	<---	PT	.726
RQA	<---	PT	.746
TPKA	<---	TPACK	.736
TCKA	<---	TPACK	.733

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	Estimate
TPCKA <--- TPACK	.748
ITUA <--- ITUE	.710
PTUA <--- ITUE	.686
PLTUA <--- ITUE	.716
UEXA <--- BTU	.714
URA <--- BTU	.689

Covariances: (Group number 1 - Default model)

	Estimate	S. E.	C. R.	P	Label
PE <--> EE	.118	.026	4.617	***	par_30
EE <--> SI	.078	.027	2.931	.003	par_31
SI <--> FC	.112	.025	4.556	***	par_32
FC <--> HM	.102	.025	4.020	***	par_33

Correlations: (Group number 1 - Default model)

	Estimate
PE <--> EE	.253
EE <--> SI	.165
SI <--> FC	.261
FC <--> HM	.210

Variances: (Group number 1 - Default model)

	Estimate	S. E.	C. R.	P	Label
PE	.474	.046	10.284	***	par_34
EE	.458	.072	6.351	***	par_35
SI	.486	.086	5.637	***	par_36
FC	.379	.044	8.710	***	par_37
HM	.626	.063	9.941	***	par_38
TI	.750	.336	2.229	.026	par_39
PT	.560	.057	9.863	***	par_40
TPACK	.553	.061	9.061	***	par_41
e29	.200	.027	7.371	***	par_42
e30	.172	.034	5.087	***	par_43
e1	.359	.026	13.587	***	par_44
e2	.376	.026	14.298	***	par_45
e3	.397	.029	13.538	***	par_46
e4	.457	.033	14.066	***	par_47
e5	.367	.026	14.340	***	par_48
e6	.297	.063	4.748	***	par_49
e7	.429	.056	7.727	***	par_50
e8	.299	.077	3.865	***	par_51

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	Estimate	S. E.	C. R.	P	Label
e9	.393	.064	6.153	***	par_52
e10	.392	.031	12.675	***	par_53
e11	.258	.026	9.909	***	par_54
e12	.287	.023	12.652	***	par_55
e13	.419	.039	10.681	***	par_56
e14	.394	.035	11.379	***	par_57
e15	.541	.045	11.896	***	par_58
e16	.067	.333	.203	.839	par_59
e17	.641	.162	3.966	***	par_60
e18	.368	.036	10.235	***	par_61
e19	.508	.042	12.209	***	par_62
e20	.396	.035	11.462	***	par_63
e21	.469	.042	11.232	***	par_64
e22	.344	.030	11.322	***	par_65
e23	.273	.025	10.753	***	par_66
e24	.383	.030	12.845	***	par_67
e25	.461	.034	13.445	***	par_68
e26	.397	.031	12.680	***	par_69
e27	.455	.042	10.894	***	par_70
e28	.412	.035	11.804	***	par_71

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
ITUE	.486
BTU	.636
URA	.475
UEXA	.510
PLTUA	.513
PTUA	.470
ITUA	.504
TPCKA	.559
TCKA	.538
TPKA	.541
RQA	.557
SEQA	.527
SQA	.604
DSIA	.356
IIA	.917
UEA	.552
UCA	.572

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	Estimate
UAM	.599
SCIA	.493
FFA	.606
PBCA	.492
PSIA	.495
GSIA	.619
EOUA	.469
PEUA	.607
OEA	.517
JFA	.537
EMA	.572
RAA	.520
PUA	.569

Matrices (Group number 1 - Default model)

Implied Covariances (Group number 1 - Default model)

	UR	UE	PL	PT	IT	TP	TC	TP	RQ	SE	SQ	DS	II	UE	UC	UA	SC	FF	PB	PS	GS	EO	PE	OE	JF	EM	RA	PU
UR	.7																											
A	8																											
	4																											
UE		.4																										
XA		2																										
		0																										
PL			.2																									
TU			7	.3																								
A			7	2	.8																							
PT				.2	.3																							
UA				7	0	.1																						
				4	9	3	.0																					
IT					.2	.3	.4	.3																				
UA					6	0	0	9	.7																			
					8	2	3	9	2																			

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF CA	PB IA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A																									
TP CK A	0	0	0	0	0	6	2	3	5	5	5	1	6	0	3	2	1	9	0	0	0	0	0	3	7	2	3	5	5	5	7	4																					
TC KA	0	0	0	0	0	3	7	2	3	5	5	5	7	4	8	2	7	6	5	2	4	0	0	0	0	0	4	4	0	2	1																						
TP KA	0	0	0	0	0	4	4	0	3	3	6	6	6	3	7	0	2	3	8	7	6	4	7	0	1	1	1	0	0	0	0	0	8																				
RQ A	1	1	0	0	0	0	0	8	5	7	9	9	9	0	0	9	4	3	5	4	2	0	0	4	1	1	1	1	0	0	0	5	0																				
SE QA	6	8	0	0	9	0	0	3	7	4	5	1	0	8	0	0	1	4	1	1	1	1	0	0	0	5	0	1	1	1	1	0	0	0	5	0																	
SQ A	1	1	1	1	0	0	0	5	5	9	6	8	0	0	9	0	0	2	6	2	3	4	1	0	7	0	0	0	8	3	8	0	0	0	0	0	0	0	9														
DS IA	2	2	4	4	4	0	0	0	0	9	3	6	6	6	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	9	2	2	4	4	4	0	0	0	0	9												
II A	0	0	0	0	0	0	0	0	0	5	8	3	3	6	6	6	0	0	0	0	0	1	1	4	8	7	7	5	0	0	0	0	0	5	7	0	0	0	0	0	0	0	5	8									
UE A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	9	8	6	1	0	0	0	0	0	0	0	0	6	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
UC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																							

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A	
JF A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	9			
	7	8	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	8			
	3	2	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	7	9			
EM A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	5	9		
	7	8	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	3	2		
	3	2	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	7	1	9		
RA A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	4	4	7	
	6	7	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	8	
	4	2	7	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	5	6	4		
PU A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	5	5	4	8
	6	7	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	3	
	9	7	7	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	8	1	2	2	0	2

Implied Correlations (Group number 1 - Default model)

	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A	
UR A	1																												
UE XA		1																											
PL TU A			1																										
PT UA				1																									

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
IT UA					1																									
TP CK A						1																								
TC KA							1																							
TP KA								1																						
RQ A									1																					
SE QA										1																				
SQ A											1																			
DS IA												1																		

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A	
II A	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UE A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UC A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UA M	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SC IA	2	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
FF A	2	2	2	1	2	0	0	0	0	0	0	0	0	0	1	1	1	5	5	5	5	5	5	5	5	5	5	5	5
PB CA	2	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	4	4	4	4	4	4	4	4	4	4	4	4
PS IA	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
GS	1																													
IA	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	5										
EA	2	2	4	4	4	0	0	0	0	0	0	0	0	0	0	0	4	6	4	5										
EA	3	7	8	2	7	0	0	0	0	0	0	0	0	0	0	0	4	0	4	3										
EO																														
UA	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
UA	9	9	8	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	8									
EA	2	5	0	3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9									
PE																														
UA	1	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5				
UA	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	3								
EA	5	8	5	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3				
OE																														
A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
A	8	8	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4				
EA	1	4	9	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2				
JF																														
A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
EA	8	8	6	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4				
EA	3	6	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	4				
EM																														
A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
EA	8	8	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4				
EA	5	8	7	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9				
RA																														
A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
EA	8	8	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4				
EA	1	4	9	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2				
PU																														
A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
EA	8	8	6	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4				
EA	5	8	6	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9				

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Residual Covariances (Group number 1 - Default model)

	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	J F A	EM A	RA A	PUA		
UR A	. 0 4 6																													
UE XA	. 0 5 1	. 0 5 8																												
PL TU A	. 0 8 5	. 0 8 9	. 0 8 7																											
PT UA	. 0 6 8	. 0 5 0	. 0 9 3	. 0 7 6																										
IT UA	. 0 5 9	. 0 7 8	. 0 4 8	. 0 7 6	. 0 7 2																									
TP CK A	. 0 1 0	. 0 1 9	. 0 2 1	. 0 0 5	. 0 0 8	. 0 0 5	. 0 0 8																							
TC KA	. 0 2 7	. 0 4 3	. 0 6 7	. 0 8 2	. 0 6 1	. 0 0 1	. 0 0 0																							
TP KA	. 0 4 2	. 0 3 5	. 0 7 1	. 0 5 3	. 0 1 8	. 0 0 4	. 0 0 3																							
RQ A	. 0 0 6	. 0 1 5	. 0 4 6	. 0 0 3	. 0 3 5	. 0 5 7	. 0 1 1	. 0 4 4																						

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	J F A	EM A	RA A	PUA
SE	0	0	0	0	0	1	1	1	0	0																		
QA	5	4	6	4	3	1	8	9	1	0																		
	4	4	8	0	8	5	3	9	2	0																		
SQ	0	0	1	0	0	0	1	1	0	0																		
A	5	6	1	8	8	8	3	5	0	0																		
	7	1	1	5	7	3	7	5	0	0																		
DS	0	0	0	1	0	0	0	1	0	1	1	0																
IA	4	3	3	1	8	6	7	0	8	1	6	0																
	7	2	7	4	3	8	3	0	7	9	5	0																
II	0	0	0	0	0	0	0	1	1	1	1	0	0															
A	2	1	6	7	4	6	7	1	5	6	5	0	0															
	1	6	1	1	1	2	7	4	5	6	6	0	0															
UE	0	0	0	0	0	0	0	0	0	0	0	0	0															
A	4	2	6	0	7	1	1	4	5	8	2	0	0															
	5	3	7	3	0	3	0	5	9	3	0	2	5	0														
UC	0	0	0	0	1	0	0	0	0	0	0	0	0															
A	1	1	9	9	0	0	0	1	4	3	4	2	0	0														
	8	4	6	3	1	2	3	6	7	5	4	9	8	3														
UA	0	0	0	0	0	0	0	0	0	0	0	0	0															
M	4	4	8	8	9	0	2	0	4	7	2	5	1	1	0	0												
	0	8	7	5	5	1	1	9	9	1	8	6	0	1	0	0												
						0									7													
SC	0	0	0	0	0	0	0	0	0	0	0	0	0															
IA	0	1	6	4	6	1	0	0	0	0	0	7	1	0	5	4	0											
	6	5	6	5	2	0	2	8	7	2	4	1	1	4	8	3	4											
FF	0	0	0	0	0	0	0	0	0	0	0	0	0															
A	3	4	2	3	2	4	2	3	1	3	2	6	0	0	3	1	0	0										

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PUA	
	3	2	7	9	6	3	3	8	5	3	1	2	7	0	3	0	5	6											
														3															
PB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CA	3	4	3	6	5	0	0	0	1	5	7	6	2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	9	6	2	0	2	1	7	6	0	5	3	0	6	1	8	5	5										
PS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
IA	3	9	4	3	7	0	2	4	6	5	2	0	9	2	5	1	1	5	0										
	2	7	9	8	1	1	2	5	8	4	4	8	7	9	5	8	9	6	9	3									
GS	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
IA	2	7	2	4	1	2	0	6	0	5	1	7	2	9	4	4	2	0	3	0	0	0	0	0	0	0	0	0	0
	7	8	5	4	9	4	9	3	6	2	6	4	2	4	5	1	9	7	0	4	4								
EO	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
UA	7	2	4	5	8	0	0	6	4	3	0	1	0	5	8	8	0	6	2	2	0								
	5	2	2	1	4	1	2	1	1	8	2	1	5	0	5	6	3	3	6	3	6	3							
PE	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0
UA	7	2	6	6	6	0	0	2	0	3	4	2	6	2	0	2	9	7	2	4	0	0							
	8	5	7	2	2	0	1	2	9	6	3	4	2	7	0	8	3	5	6	2	5	3	4						
OE	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0
A	5	6	9	4	0	2	5	6	2	4	9	6	8	0	3	3	9	0	8	7	9	1	1	0					
	5	1	1	7	3	9	0	3	4	0	2	5	4	3	4	7	3	4	1	0	1	5	4	0					
JF	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
A	3	9	3	2	0	1	8	4	3	2	4	7	6	0	9	2	8	0	9	9	9	0	0	0	0	0	0	0	0
	0	7	4	6	4	4	1	0	5	6	6	6	3	3	1	5	6	3	2	1	0	4	6	3	0				
EM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0
A	6	0	7	7	7	2	6	2	5	3	8	4	6	3	1	5	6	0	6	7	6	0	1	0	0	0	0	0	0
	9	6	5	2	6	8	2	9	4	2	7	6	3	9	7	3	4	0	5	8	5	4	7	7	8	0			

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PUA	
																		6											
RA	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
A	5	0	7	6	7	4	7	9	0	0	8	1	5	3	0	3	8	0	2	7	8	1	3	0	0	2	0	0	
	5	1	4	1	7	0	6	3	2	2	6	4	1	4	6	9	1	8	5	7	1	5	5	6	1	0	2	0	
PU	0	1	0	0	1	0	0	0	0	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0
A	5	2	6	0	0	3	5	5	9	6	2	6	9	1	1	1	7	1	7	5	9	0	1	0	0	0	0	0	
	1	1	2	1	4	5	9	2	0	6	5	8	5	1	2	6	8	4	6	5	3	9	2	8	1	2	4	0	

Standardized Residual Covariances (Group number 1 - Default model)

	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PUA	
UR	1																												
A	0	1																											
	8	1	1																										
UE																													
XA		3	0																										
		3	9																										
		8	2																										
PL		2	2	1																									
TU																													
A		7	7	6																									
		8	2	4																									
		1	1	2	1																								
PT																													
UA		9	2	4	5																								
		2	9	6	2																								
		9	8	0	6																								
		1	2	1	2	1																							
IT																													
UA		7	1	3	0	6																							
		7	3	4	6	3																							
		1	4	0	5	6																							

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE	UC A	UA M	SC IA	FF CA	PB IA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
TP CK A
	3	6	7	1	2	0																								
	7	2	2	6	8	0																								
	0	2	2	3	0	0																								
		1	2	2	1	-																								
TC KA
	8	2	1	5	9	0	0																							
	7	6	0	2	7	2	0																							
	1	8	9	7	4	8	0																							
	1	1	1
TP KA	.	8	.	.	5	0	.	0																						
	1	8	9	3	1	9	0	0																						
	5	8	2	9	1	9	7	0																						
	9	5	6	3	1	9	6	0																						
	-	1	-	1	1	3	3	.																						
RQ A	.	3
	1	8	3	0	0	8	3	7	0																					
	7	9	3	7	2	8	4	2	0																					
	0	9	4	7	9	1	9	0	0																					
	1	1	1	1	1	3	5	4	.																					
SE QA
	4	0	7	0	0	4	0	7	2	0																				
	2	7	8	2	1	8	4	0	6	0																				
	7	7	4	0	5	8	9	6	7	0																				
	1	1	3	2	2	2	4	3	-	-																				
SQ A
	6	6	1	3	5	7	0	9	0	2	0																			
	2	0	2	3	3	1	7	3	0	0	0																			
	7	5	9	7	4	7	9	0	1	6	0																			
	1	1	3	2	2	2	2	2	2	4	.																			
DS IA	.	8
	3	3	0	0	3	1	0	4	2	8	2	0																		
	0	3	1	2	3	3	9	6	9	5	5	0																		
	4	3	3	0	5	1	0	2	2	3	4	0																		
		1	2	1	2	2	3	4	4	4	.																			
II A
	6	4
	3	4	8	0	2	1	4	0	4	3	4	0	0																	
	9	3	4	7	7	4	3	8	8	8	1	0	0																	
		7	5	4	7	4	6	0	3	3	.																			
UE	1	.	1	.	1	.	.	1	1	1

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
A	. 1 3 0	5 4 1 0	. 6 6 6	0 7 7	. 7 7 7	3 5 0	2 4 8	. 0 4 8	. 4 8 7	. . .	4 7 4	0 4 .	1 7 3	0 0 0	0 6 9	0 3 0														
UC A			2 2 2			-	1			-																				
UA M						6 2	0 1	2 6	7 0	7 3	2 2	2 2	1 0	0 7	1 4	0 0														
SC IA			2 1 2			-	-	-	2	1 1	1 1	1 1	1 1	1 1	1 1	1 1														
FF A						8 1	4 9	6 8	2 0	0 0	3 1	1 1	1 1	1 1	1 1	1 1														
PB CA						9 4	1 8	5 9	7 8	5 9	6 7	3 2	0 9	3 3	0 9	3 3														
PS IA						6 .	4 7	5 8	7 2	. .	7 2														
GS IA						8 .	1 .	4 .	6														

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
EO UA	3		6	4		5	8		2		6		5	7	2	1														
	2	-	1	1	2	-	-	-	1	1		-		2	1	2	3	3	2											

	3	6	2	4	5	4	6	2	7	2	9	3	4	5	5	3	0	5	0	7	8	0								
PE UA	3	7	5	7	9	0	9	8	7	6	2	9	6	1	6	0	2	1	7	2	1	6								
	5	1	4	7	5	8	6	1	2	5	1	5	6	2	7	5	1	2	0	5	2	6								
	2		2	1	1	-	-	-				1	4	3	5	4	3	2		1										

OE A	4	7	0	8	9	2	3	5	8	1	9	6	3	5	7	6	3	4	7	4	1	4	9	8						
	9	4	6	6	7	2	9	8	6	7	7	6	9	3	4	7	5	4	5	1	2	3	5							
	3	3	6	8	7	3	3	7	0	0	9	2	4	5	5	9	3	0	1	5	3	3	5							
	1	1	2	1	3	1	1	1		1	2	1	2	2	3	3	3		5	2	2									
JF A	7	7	8	4	2	0	6	7	7	0	7	8	6	6	9	8	5	1	8	2	9	4	4	0						
	5	7	1	0	9	4	4	7	1	9	1	3	4	5	6	0	0	8	5	4	2	0	0	0						
	8	8	6	3	2	5	0	3	5	4	2	8	5	7	2	2	5	8	0	0	2	0	0	0						
	2		2		2		2		1	1	1	2	2	3	2		5	2	2											
EM A	8	.	9	6	.	4	.	9	9	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	4	1	9	0	3	3	7	2	3	9	0	3	3	4	3	5	0	4	7	1	1	7	3	0					
	2	8	8	2	3	6	0	4	3	2	6	6	3	5	6	4	0	5	2	2	9	2	3	5						
	1	2	2	1	2	1	1	1		2	1	1	3	3	3	2	-	4	2	1										
RA A	9	8	1	9	1	8	7	8	8	3	1	7	2	1	8	1	1	8	2	8	1	4	1	1	0					
	9	1	0	6	8	5	3	7	0	2	7	7	3	2	3	8	9	0	7	8	2	9	7	8	0					
	0	2	5	7	4	6	3	0	6	2	0	7	5	4	6	4	3	0	7	1	9	0	2	8	4	0				
	1	2	2	1	2	1	2	2	-	-	2	1	3	3	3	3	-	3	2	2	-	1	-	-	-					
PU A	7	9	2	8	4	4	4	5	0	0	4	3	5	4	0	8	0	6	9	4	5	4	1	1	5	0				
	3	1	6	0	1	1	6	6	6	6	8	8	7	1	9	0	0	3	7	2	6	7	2	7	9	0				
	5	3	7	7	6	6	1	0	5	4	4	3	4	5	7	6	2	0	8	0	5	3	6	0						
	1	3	1		3	1	1	1	2	1	3	1	2	2	3	3	2	-	5	1	2	-								
PU A	.	.	.	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	5	3	8	1	1	8	3	5	7	5	8	8	7	1	0	7	4	4	7	8	2	3	2	0	1	0				
	5	7	3	6	7	9	5	8	7	2	0	3	3	4	5	8	9	6	2	0	3	8	6	2	5	0				
	1	8	8		3	7	1	1	7	7	8	8	4	0	1	1	1	5	7	2	7	4	9	2	4					

Factor Score Weights (Group number 1 - Default model)

UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A
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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A		
TP AC K
	0	0	0	0	0	3	2	2	.	.	.	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	0	0	1	1	1	4	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PT	3	3	2	1	2	6	5	5	2	2	2	0	3	2	3	3	3	4	3	2	3	3	5	2	1	2	2	2	2	

	0	0	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TI	3	3	1	0	1	0	0	0	6	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
	3	4	0	8	0	3	2	2	6	1	3	0	5	4	5	5	1	4	9	3	5	5	8	3	2	3	3	3	3	

HM	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	1	5	4	5	1	0	0	1	1	1	3	6	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	
FC	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	2	2	2	0	0	0	0	0	0	0	0	3	8	8	0	1	0	0	0	0	0	0	0	0	0	0	0	
	8	8	5	1	5	3	3	2	5	4	5	0	6	0	1	7	7	0	6	7	0	6	9	3	3	3	3	3	4	
SI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	
	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3	1	0	1	1	0	1	0	0	0	0	0	0	
EE	9	0	2	0	2	3	3	2	8	7	0	0	6	5	6	6	5	2	1	3	9	8	3	3	3	3	3	3	3	

	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PE	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	1	9	3	1	1	0	0	0	0	0	0	
	7	7	8	5	8	2	2	2	4	3	4	0	4	6	7	7	7	3	4	6	7	0	6	4	4	4	4	4	4	

EE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	2	7	2	4	3	3	6	5	6	1	8	5	6	6	1	5	0	1	6	9	8	9	8	0	9	0	0	
PE
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PE	3	3	4	2	4	2	2	1	2	2	3	0	3	2	3	3	3	5	3	4	5	8	2	6	5	8	5	6	6	

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	UR A	UE XA	PL TU A	PT UA	IT UA	TP CK A	TC KA	TP KA	RQ A	SE QA	SQ A	DS IA	II A	UE A	UC A	UA M	SC IA	FF A	PB CA	PS IA	GS IA	EO UA	PE UA	OE A	JF A	EM A	RA A	PU A	
IT	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UE	6	6	0	7	0	1	1	1	0	0	1	0	2	1	2	2	1	1	1	1	1	2	2	4	1	1	1	1	1
	1	2	4	3	4	4	2	0	9	7	0	2	6	8	2	2	4	9	2	5	2	6	1	3	2	4	3	5	
BT	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U	5	5	7	6	7	0	0	0	3	3	4	0	0	0	0	0	5	7	4	0	1	0	1	0	0	0	0	0	0
	1	6	4	3	4	4	3	3	6	0	2	0	7	7	8	8	5	2	7	8	1	7	0	4	3	4	4	4	4

Total Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
ITUE	.116	.174	.087	.221	.272	.131	.262	.214	.000	.000
BTU	.068	.328	.051	.129	.530	.077	.153	.125	.585	.000
URA	.060	.291	.045	.115	.470	.068	.136	.111	.519	.887
UEXA	.068	.328	.051	.129	.530	.077	.153	.125	.585	1.000
PLTU A	.121	.180	.090	.229	.281	.136	.271	.222	1.035	.000
PTUA	.119	.178	.089	.227	.279	.135	.268	.219	1.025	.000
ITUA	.116	.174	.087	.221	.272	.131	.262	.214	1.000	.000
TPCK A	.791	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.851	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	1.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.943	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	1.005	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	1.000	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.687	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	1.000	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	1.031	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.918	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	1.000	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
SCIA	.000	.000	.000	.000	.858	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	1.02 3	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.890	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.910	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.911	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	1.05 9	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	1.05 9	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.928	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
ITUE	.139	.209	.120	.281	.268	.147	.284	.236	.000	.000
BTU	.074	.357	.064	.149	.475	.078	.151	.125	.530	.000
URA	.051	.246	.044	.103	.327	.054	.104	.086	.365	.689
UEXA	.053	.255	.046	.106	.339	.056	.107	.089	.379	.714
PLTUA	.099	.149	.086	.201	.192	.105	.203	.169	.716	.000
PTUA	.095	.143	.082	.192	.184	.101	.195	.162	.686	.000
ITUA	.099	.148	.085	.199	.190	.104	.202	.168	.710	.000
TPCKA	.748	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.733	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.736	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.746	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.726	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.777	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.597	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.958	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.743	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.757	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	.774	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.702	.000	.000	.000	.000	.000

	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
FFA	.000	.000	.000	.000	.779	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.701	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.703	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.787	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.685	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	.779	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.719	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	.733	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.756	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.721	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.754	.000	.000

Direct Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
ITUE	.116	.174	.087	.221	.272	.131	.262	.214	.000	.000
BTU	.000	.227	.000	.000	.371	.000	.000	.000	.585	.000
URA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.887
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.00 0
PLTU A	.000	.000	.000	.000	.000	.000	.000	.000	1.03 5	.000
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	1.02 5	.000
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	1.00 0	.000
TPCK A	.791	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.851	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	1.00 0	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.943	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	1.00 5	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	1.00 0	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.687	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	1.00 0	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	1.03 1	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.918	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
UAM	.000	.000	.000	1.00 0	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.858	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	1.02 3	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.890	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.910	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.911	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	1.05 9	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	1.05 9	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.928	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	1.00 0	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
ITUE	.139	.209	.120	.281	.268	.147	.284	.236	.000	.000
BTU	.000	.247	.000	.000	.332	.000	.000	.000	.530	.000
URA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.689
UEXA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.714
PLTUA	.000	.000	.000	.000	.000	.000	.000	.000	.716	.000
PTUA	.000	.000	.000	.000	.000	.000	.000	.000	.686	.000
ITUA	.000	.000	.000	.000	.000	.000	.000	.000	.710	.000
TPCKA	.748	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.733	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.736	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.746	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.726	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.777	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.597	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.958	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.743	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.757	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
UAM	.000	.000	.000	.774	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.702	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	.779	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.701	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.703	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.787	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.685	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	.779	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.719	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	.733	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.756	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.721	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.754	.000	.000

Indirect Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
ITUE	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
BTU	.068	.102	.051	.129	.159	.077	.153	.125	.000	.000
URA	.060	.291	.045	.115	.470	.068	.136	.111	.519	.000
UEXA	.068	.328	.051	.129	.530	.077	.153	.125	.585	.000
PLTUA	.121	.180	.090	.229	.281	.136	.271	.222	.000	.000
PTUA	.119	.178	.089	.227	.279	.135	.268	.219	.000	.000
ITUA	.116	.174	.087	.221	.272	.131	.262	.214	.000	.000
TPCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
PEUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	TPACK	PT	TI	HM	FC	SI	EE	PE	ITUE	BTU
ITUE	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
BTU	.074	.111	.064	.149	.142	.078	.151	.125	.000	.000
URA	.051	.246	.044	.103	.327	.054	.104	.086	.365	.000
UEXA	.053	.255	.046	.106	.339	.056	.107	.089	.379	.000
PLTUA	.099	.149	.086	.201	.192	.105	.203	.169	.000	.000
PTUA	.095	.143	.082	.192	.184	.101	.195	.162	.000	.000
ITUA	.099	.148	.085	.199	.190	.104	.202	.168	.000	.000
TPCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TCKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TPKA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SEQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SQA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
DSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
IIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
UAM	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SCIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
FFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PBCA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
GSIA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EOUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PEUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
OEA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
JFA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EMA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
RAA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PUA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

		M. I.	Par Change
PT <--> TPACK		25.555	.144
TI <--> TPACK		9.697	.095
TI <--> PT		26.822	.158
SI <--> HM		16.859	.115
EE <--> HM		8.264	.079
EE <--> FC		9.075	.064
PE <--> TPACK		5.707	.059
PE <--> PT		4.778	.054
PE <--> TI		6.741	.069
PE <--> HM		13.328	.094
PE <--> SI		8.236	.067
e27 <--> SI		4.218	.052
e27 <--> EE		10.714	-.081
e24 <--> SI		4.933	.050
e24 <--> e26		4.253	-.040
e22 <--> PT		7.500	.063
e22 <--> e29		5.170	.037
e21 <--> PT		6.416	.068
e21 <--> SI		4.152	.052
e20 <--> e29		4.766	-.038
e19 <--> TPACK		10.351	.088
e18 <--> PE		7.645	.059
e18 <--> e29		7.355	.048
e17 <--> e26		4.557	-.050
e17 <--> e18		7.661	.067
e16 <--> PT		13.428	.092
e16 <--> e20		6.933	.057
e15 <--> e25		7.891	-.072
e14 <--> SI		4.305	.049
e14 <--> e30		5.010	-.045
e14 <--> e20		4.219	.044
e14 <--> e18		8.226	-.061
e13 <--> SI		4.930	.055
e13 <--> EE		4.911	.054
e12 <--> EE		5.548	.045
e11 <--> TPACK		4.375	.044
e11 <--> EE		7.303	-.052

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	M. I.	Par Change
e11 <--> PE	35.887	-.109
e10 <--> PE	43.866	.137
e10 <--> e14	5.288	.047
e8 <--> e26	4.265	-.043
e8 <--> e24	9.278	.062
e7 <--> e27	9.399	-.073
e7 <--> e11	6.314	.047
e6 <--> HM	13.235	.092
e6 <--> e13	11.377	.075
e6 <--> e12	6.463	.044
e5 <--> e27	4.361	-.043
e5 <--> e10	5.341	.043
e2 <--> e20	4.061	-.039
e2 <--> e18	4.239	.040
e1 <--> PT	6.573	.058
e1 <--> e25	9.502	-.062
e1 <--> e10	4.490	.040

Variiances: (Group number 1 - Default model)

M.I.	Par Change

Regression Weights: (Group number 1 - Default model)

	M. I.	Par Change
UEXA <--- EE	6.043	-.135
UEXA <--- EOUA	11.374	-.119
PTUA <--- PUA	8.355	-.096
ITUA <--- SI	4.462	.099
ITUA <--- GSIA	8.027	.090
ITUA <--- JFA	4.282	.058
TCKA <--- PT	7.500	.112
TCKA <--- ITUE	5.017	.110
TCKA <--- PTUA	6.313	.074
TCKA <--- ITUA	4.850	.069
TCKA <--- SEQA	7.863	.074
TCKA <--- SQA	4.751	.062
TCKA <--- JFA	5.524	.065
TPKA <--- PT	6.416	.121
TPKA <--- RQA	6.073	.084
TPKA <--- SEQA	4.908	.069
SEQA <--- TPACK	10.351	.160

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	M. I.	Par	Change
SEQA <--- TPCKA	6.013	.102	
SEQA <--- TCKA	9.504	.117	
SEQA <--- TPKA	6.996	.086	
SQA <--- PE	8.226	.132	
SQA <--- ITUE	9.039	.158	
SQA <--- BTU	4.578	.105	
SQA <--- PLTUA	6.529	.083	
SQA <--- PTUA	6.856	.083	
SQA <--- ITUA	5.714	.080	
SQA <--- DSIA	10.287	.095	
SQA <--- UCA	5.969	-.075	
SQA <--- OEA	7.486	.092	
SQA <--- RAA	10.432	.107	
SQA <--- PUA	6.141	.080	
DSIA <--- FC	6.874	.158	
DSIA <--- PTUA	4.970	.079	
DSIA <--- SQA	4.409	.072	
DSIA <--- SCIA	6.525	.112	
DSIA <--- FFA	4.628	.088	
DSIA <--- GSIA	4.229	.077	
IIA <--- PT	13.428	.163	
IIA <--- TPKA	4.298	.061	
IIA <--- RQA	15.720	.125	
IIA <--- SEQA	11.559	.098	
IIA <--- SQA	5.154	.070	
IIA <--- PUA	4.920	.073	
UEA <--- PTUA	5.086	-.082	
UCA <--- FC	5.040	.121	
UCA <--- SI	6.128	.122	
UCA <--- PTUA	4.361	.066	
UCA <--- SQA	4.870	-.067	
UCA <--- PBCA	8.221	.096	
UCA <--- GSIA	6.138	.082	
UAM <--- SI	5.988	.127	
UAM <--- EE	9.384	.165	
UAM <--- PE	4.231	.100	
UAM <--- PSIA	7.026	.093	
UAM <--- PEUA	13.170	.130	
SCIA <--- EE	8.043	.120	

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	M. I.	Par Change
SCIA <--- PE	4.247	.078
SCIA <--- PEUA	9.514	.086
SCIA <--- OEA	4.011	.056
SCIA <--- RAA	5.014	.061
FFA <--- TPACK	4.375	.079
FFA <--- PE	29.852	-.213
FFA <--- TPCKA	4.895	.070
FFA <--- EOUA	4.336	.058
FFA <--- OEA	20.384	-.129
FFA <--- JFA	18.682	-.108
FFA <--- EMA	15.886	-.103
FFA <--- RAA	21.267	-.130
FFA <--- PUA	23.002	-.131
PBCA <--- PE	39.772	.280
PBCA <--- SQA	4.042	.059
PBCA <--- OEA	32.292	.185
PBCA <--- JFA	30.533	.157
PBCA <--- EMA	23.969	.144
PBCA <--- RAA	14.071	.120
PBCA <--- PUA	32.089	.176
PSIA <--- HM	4.374	.087
PSIA <--- UAM	6.189	.072
GSIA <--- ITUA	8.362	.097
GSIA <--- UCA	5.342	.071
GSIA <--- PUA	4.507	.069
EOUA <--- FFA	4.449	.079
PEUA <--- HM	16.106	.164
PEUA <--- FC	5.890	.129
PEUA <--- UEA	9.509	.082
PEUA <--- UCA	5.492	.071
PEUA <--- UAM	21.111	.131
PEUA <--- SCIA	9.828	.121
OEA <--- UCA	4.034	.056
OEA <--- PBCA	6.112	.075
RAA <--- TPKA	4.694	.058
PUA <--- PT	6.573	.103
PUA <--- RQA	6.901	.075
PUA <--- SQA	4.848	.061

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Bootstrap Distributions (Default model)

ML discrepancy (implied vs sample) (Default model)

	737.139	|*
	763.813	|*
	790.487	|**
	817.162	|*****
	843.836	|*****
	870.510	|*****
	897.185	|*****
N = 2000	923.859	|*****
Mean = 920.157	950.533	|*****
S. e. = 1.286	977.208	|*****
	1003.882	|*****
	1030.556	|****
	1057.231	|**
	1083.905	|*
	1110.579	|*

ML discrepancy (implied vs pop) (Default model)

	624.520	|*
	633.020	|*
	641.521	|***
	650.022	|*****
	658.522	|*****
	667.023	|*****
	675.523	|*****
N = 2000	684.024	|*****
Mean = 671.918	692.524	|*****
S. e. = .355	701.025	|****
	709.525	|**
	718.026	*
	726.527	*
	735.027	*
	743.528	*

K-L overoptimism (unstabilized) (Default model)

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	-448.619	*
	-354.245	*
	-259.872	*
	-165.498	***
	-71.125	*****
	23.249	*****
	117.622	*****
N = 2000	211.996	*****
Mean = 184.826	306.369	*****
S. e. = 3.998	400.743	|*****
	495.116	|*****
	589.490	|**
	683.863	|*
	778.237	|*
	872.611	|*

K-L overoptimism (stabilized) (Default model)

	24.749	|*
	48.402	|*
	72.056	|**
	95.709	|****
	119.363	|*****
	143.017	|*****
	166.670	|*****
N = 2000	190.324	|*****
Mean = 188.977	213.977	|*****
S. e. = 1.175	237.631	|*****
	261.284	|*****
	284.938	|****
	308.591	|**
	332.245	*
	355.899	*

ML discrepancy (implied vs pop) (Default model)

	624.520	*
	633.020	*

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	641.521	***
	650.022	*****
	658.522	*****
	667.023	*****
	675.523	*****
N = 2000	684.024	*****
Mean = 671.918	692.524	*****
S. e. = .355	701.025	****
	709.525	**
	718.026	*
	726.527	*
	735.027	*
	743.528	*

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	71	575.800	335	.000	1.719
Saturated model	406	.000	0		
Independence model	28	5972.869	378	.000	15.801

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.067	.938	.925	.774
Saturated model	.000	1.000		
Independence model	.176	.456	.416	.425

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.904	.891	.957	.951	.957
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.886	.801	.848
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

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Model	NCP	LO 90	HI 90
Default model	240.800	178.228	311.242
Saturated model	.000	.000	.000
Independence model	5594.869	5347.901	5848.254

FMIN

Model	FMIN	FO	LO 90	HI 90
Default model	.942	.394	.292	.509
Saturated model	.000	.000	.000	.000
Independence model	9.776	9.157	8.753	9.572

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.034	.030	.039	1.000
Independence model	.156	.152	.159	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	717.800	724.876	1031.388	1102.388
Saturated model	812.000	852.460	2605.193	3011.193
Independence model	6028.869	6031.659	6152.537	6180.537

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.175	1.072	1.290	1.186
Saturated model	1.329	1.329	1.329	1.395
Independence model	9.867	9.463	10.282	9.872

HOELTER

Model	HOELTER	HOELTER
	.05	.01
Default model	402	423
Independence model	44	46

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