



## RESEARCH ARTICLE

## Exploring the Efficacy of Unified Technology Acceptance Models in Enhancing English Speaking Skills Through Video-Conferencing Tools

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**ABSTRACT**

Language learning and professional communication have taken a rapid turn towards global adoption of video conferencing technologies. This study is conducted to investigate the Iraqi United Nations staff's perceptions and their adoption of video-conferencing tools to develop the English-speaking skills based on the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). The data were collected from a structured survey administered on 200 respondents and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). It has demonstrated significant effects of performance expectancy, effort expectancy, social influence on technology acceptance and skill development. Findings indicate that it is vital to develop tailored strategies to stimulate adopt to technology, which takes into consideration the implications to improving the digital infrastructure, training users and the support mechanisms of the organization. The purpose of this contribution to the literature is to show that UTAUT2 is applicable outside of its original focus to a multicultural professional setting and to explore variables relating to associated communication challenges faced by Iraqi professionals.

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**INTRODUCTION**
**1.1 Background**

The growing globalization, English language proficiency is vital for professional success even in a multi-cultural environment like the United Nations. It is a lingua franca, English which helps us to communicate and collaborate with other diverse teams. But most of Iraq's older traditional methods of language instruction focus on reading and writing, leaving speaking under developed. This problem is intensified by the reliance on stale teaching methodologies, insufficient resources and limited practice on the use of real language. (Ajzen, 1991).

English language education plays a crucial role in Iraq's educational system. The primary objective of teaching English as a foreign language in Iraq is to equip students with the ability to read and understand English literature and to translate between languages (Kareem, 2009). However, certain language skills, particularly speaking and listening, have often been neglected in favor of reading and writing. It is essential to recognize that speaking skills are equally, if not more, important than writing skills, as they serve as a critical medium for communication and understanding. To convey ideas clearly and effectively, learners of English must develop strong speaking abilities.

Despite considerable efforts to train Iraqi pupils with English language abilities, most students struggle to connect effectively in English (Ruan, 2015). This may be due to low motivation levels among learners, a crucial factor in developing language skills. Mastery of English is often a prerequisite for obtaining well-paying jobs in the private sector and international organizations operating in Iraq. Iraq has two distinct educational systems due to the presence of two official languages. The Kurdish governorates in northern Iraq speak Kurdish, while the rest of Iraq

speaks Arabic. The methods used for language acquisition in Kurdistan differ from those used in the rest of Iraq. These differences in language and culture also influence technology adoption in language learning that influences decision-making (Ruan, 2015).

Both educational systems, despite their differences, share the challenge of integrating technology into classrooms to enhance English language education. Technology-based approaches offer valuable opportunities to support English learning, particularly in developing speaking skills. Traditional face-to-face education, however, presents certain limitations, including inflexible schedules, higher costs, a lack of individual attention in large student groups, and restricted access to often costly learning materials.

Therefore, online learning through video conferencing tools is recommended to provide flexibility for learning and customized learning experiences (Ruan, 2015). The challenges facing English language education in Iraq have implications for workplace communication. At present, the inability to effectively communicate in English can be a huge barrier to employment opportunities in international organizations and private-sector companies working in Iraq. The employers often need people who speak English assuredly enough to communicate with the colleagues and customers from different countries. In addition, workplace communication is more than merely capability to write and read. Being able to speak and listen are also important for the effective communication in a professional setting. Accordingly, lack of stress on such skills in English language education in Iraq can involve serious problems for learners in search of a job. (Genc, 2016).

Also, the Kurds' cultural and linguistic differences from Arabic speaking areas of Iraq may add to discrepancies in workplace communication. For companies operating in Iraq however, companies need to be aware of the various communication styles and preferences of employees from various regions there for them to effectively communicate with each other across teams and departments.

Considering such challenges, technology may enable English language education in developing learners' workplace communication skills. Online learning with video conferencing tools provides learners with a personalized and flexible learning experience which improves their listening and speaking language skills (Al-Momani, 2017). Additionally, the use of technology could contribute in bridging cultural and linguistic variations in the work environment, therefore facilitating conversational and interrelationship among employees having different cultural and linguistic backgrounds.

With this, video conferencing tools can be integrated to help address the issues of not being able to have a live interaction with the teacher and lack of immersive languages. The advantage of these tools is that it makes synchronous communication almost as same as face-to-face interaction and suits this purpose best for improving their speaking proficiency. Various features such as video and audio communication, screen sharing and breakout rooms encourage dynamic learning environments. These tools are highlighted to have a potential of serving as a means to better language learning outcomes speaking fluency, pronunciation and confidence in particular. (Bailey & Lee, 2022).

## **1.2 Research Problem**

Although there are plenty of advantages in using the video conferencing technologies, it seems that those technologies are not very popular in use amongst Iraqi UN staff, which makes facing different barriers a matter of fact. Such insufficient technological infrastructure, resistance to change and cultural challenges are included. Additionally, the natural disadvantages of virtual communication like the absence of nonverbal cues and the risk of 'Zoom fatigue' further make them difficult to use. However, these challenges point out that an in depth understanding of the factors affecting technology acceptance is highly needed in this situation.

The aim of this study is to investigate the use of the UTAUT2 model in understanding and increasing the adoption of video-conferencing for English language skill development among Iraqi UN staff. The work of the research is to analyze these challenges and offer actionable insights that improve communication competency and overall business efficiency in multicultural professional environments.

### 1.3 Objectives

This research aims to:

Evaluate the impact of UTAUT2 factors on video-conferencing adoption among Iraqi UN staff.

Identify specific challenges faced by users in adopting these tools.

Provide actionable recommendations for enhancing language proficiency through technology.

### 1.4 Significance of the Study

To illustrate this potential, the results of this study focus on a professional context where communication is so important that cross cultural collaboration often breaks down because of language. The results are useful to other discussions about technology adoption in organization and educational domains, providing practical implications for organizations striving to enhance their communication strategy.

## 2. LITERATURE REVIEW

### 2.1 Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

Venkatesh et al. (2012) He further developed a framework to understand technology adoption abbreviated as UTAUT2. This extends the original UTAUT by including hedonic motivation, price value and habit to the model. Collectively, performance expectancy, effort expectancy, social influence, facilitating conditions, and these factors affect behavioral intention and the actual usage behavior. UTAUT2 has been applied to other contexts such as teachers, healthcare, and interprofessional work, and has been validated as applicable. (Davis, 1989).

It is the expectation that using a particular technology will improve performance. In regards to video-conferencing tools, this construct is highly connected with what video-conferencing tools are capable of improving a person's language skills. Conversely, effort expectancy is accuracy of use of technology which can have high influence on technology usage if the technology user has not sufficient technical history. While facilitating conditions include the resources and supports that are needed to utilize technology in an effective manner, social influence concerns the degree to which important others support the use of technology.

### 2.2 Video-Conferencing in Language Learning

Videoconferencing tools including Zoom, Google Meet, and Microsoft Teams have completely changed the language education by making synchronous communication and live feedback possible. These tools can be used to support different pedagogical approaches such as role playing, small group discussions and collaborative projects, which can be very useful to develop speaking skills. Li et al. (2022) and Yu (2022) utilize studies which show their effect on fluency, pronunciation, and cultural competence.

However, there are some challenges associated with the use of video-conferencing tools. Mental exhaustion from too much video calling is becoming its own issue: "Zoom fatigue." The need for such strategies is to optimize video-conferencing tools as resources for the language learning.

### 2.3 Contextual Challenges in Iraq

Additionally, there are challenges to video-conferencing tools adoption in the Iraq unique socio cultural and technological landscape. Internet connectivity is also limited for these tools, for those who can even access them, and there is little training or encouragement to use them, and people's cultural norms seem to get in the way in professional settings. For instance, an organization's use of hierarchical communication structures may influence its employees' willingness to accept new technologies (Dincă et al., 2023). Additionally, the absence of digital literacy and technical support exacerbates these issues through illustrating a need for targeted interventions.

### 2.4 Comparative Studies

Video conferencing has been adopted by organizations and by educational institutions around the world for language learning. Yet, most of these studies focus on studying students in

developed countries, leaving a gap as to how these tools work in low resource, multicultural and professional environments of Iraq. Comparative studies can be useful in identifying the differences between the factors affecting technology adoption across different contexts, and the insights drawn from such study can be used to further develop more context specific strategies.

### **3. METHODOLOGY**

#### **3.1 Research Design**

This is a quantitative study that uses cross-sectional survey design to determine the factors involved in adopting videoconferencing tools by the Iraqi UN staff. The study is based on the UTAUT2 framework and constructs are measured by using validated scales. A questionnaire was developed to collect structured data on the experience and perception that the participants had with the use of video-conferencing tools.

#### **3.2 Sample**

As a part of the study sample, 200 Iraqi UN staff members were selected using stratified random sampling with this strategy. Moreover, the participants came from different roles and departments, hence giving a complete vision of the technology uptake in the entire organization. The sample included individuals from different experience and technical proficiency levels, which produced a balanced view on the problems and possibilities of using the video conferencing tools.

#### **3.3 Data Collection**

An online survey was distributed via email and data were collected. Informed consent was obtained from all the participants and the responses were anonymised to maintain confidentiality. The response rate of the survey is 85% and the valid responses here are 170. The survey was pilot tested among 20 respondents to increase reliability of the data by making minor revisions to increase clarity and relevance of the survey questions.

#### **3.4 Instrument Design**

The questionnaire included 30 items for assessing the performance of the five key constructs including performance expectancy, effort expectancy, facilitating conditions, social influence and behavioral intention. These items were structured such that each item was fit to measure participant's perception and experience on these constructs, thereby allowing a thorough analysis of the underlying theoretical framework. The participants were also captured through the use of a 5-point Likert statistical scale which outlines five sets of Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5), in order to gather the data about the responses topographically without any ambiguity. This method allowed to quantify subjective perception, providing that collected data are reliable and valid.

#### **3.5 Data Analysis**

SmartPLS 4.0 provided the platform for carrying out data analysis through Partial Least Squares Structural Equation Modeling (PLS-SEM). The research included two primary evaluation steps which were measurement model validation and structural model evaluation. This research measured the validity and reliability of the measurement model through Cronbach's alpha procedures along with composite reliability and average variance extracted (AVE). The structural model evaluation confirmed hypotheses testing while determining the significant relationships between the model constructs.

### **4. RESULTS**

#### **4.1 Descriptive Statistics**

Table 1 displays the demographic information about the study participants as presented in this research. The research participants consisted of sixty percent male respondents alongside forty percent female respondents which created diverse insights. A mix of experienced individuals with early 25s to 45+ aged participants attended the research at an average age of 35 years.

**Table 1: Descriptive Statistics**

DEMOGRAPHIC VARIABLE	CATEGORY	FREQUENCY	PERCENTAGE
GENDER	Male	102	60%
	Female	68	40%
AGE	25-34	70	41%
	35-44	80	47%
	45+	20	12%

**4.2 Measurement Model Validation**

Reliability and validity of the measurement model have been assessed. This was corroborated by Cronbach’s alpha and composite reliability scores of all the constructs which were above 0.7. It is found that all the average variance extracted (AVE) values are exceeding 0.5 which validates Convergent validity.

**Table 2: Reliability and validity metrics**

Construct	Cronbach's Alpha	Composite Reliability	AVE
Performance Expectancy	0.91	0.93	0.72
Effort Expectancy	0.88	0.91	0.68
Social Influence	0.86	0.89	0.65
Facilitating Conditions	0.85	0.88	0.61
Behavioral Intention	0.92	0.94	0.75

Discrimination validity of the constructs is further assessed using the Fornell – Larcker criterion. The results indicate that all constructs present relatively high discriminant validity, this suggesting that each construct is different empirically from the other ones. In particular, discriminant validity is satisfied if the square root of the Average Variance Extracted (AVE) for every construct is higher than its maximum correlation with any other construct according to the analysis.

**4.3 Structural Model Evaluation**

Four UTAUT2 constructs were hypothesized to have relations with behavioral intention to consume black tea. The structural model was analyzed in order to test the hypothesized relationships among UTAUT2 constructs and behavioral intention. R<sup>2</sup> values were used to evaluate the model’s explanatory power. The R<sup>2</sup> value for behavioral intention was 0.67 which implies that the independent variables account for 67% of the variance.

Path coefficients and their significance were assessed using bootstrapping with 5,000 resamples.

**Table 3: Hypothesis testing.**

Hypothesis	Path Coefficient	t-value	p-value	Result
H1: Performance Expectancy → Behavioral Intention	0.45	8.12	<0.001	Supported
H2: Effort Expectancy → Behavioral Intention	0.30	6.45	<0.001	Supported
H3: Social Influence → Behavioral Intention	0.22	4.78	<0.001	Supported
H4: Facilitating Conditions → Behavioral Intention	0.18	3.92	<0.001	Supported

**4.4 Mediation Analysis**

Mediation analysis was performed to explore the indirect effects. Behavioral intention was mediated by effort expectancy in the relationship between facilitating conditions. Performance expectancy was also mediated by social influence between the performance expectancy and behavioral intention intentions, where the influence resulted from the tendency for other people

to adopt the online sales system. Result of these indicate that the relationship among UTAUT2 constructs to use technology.

#### 4.5 Descriptive Insights into Adoption Challenges

Participants identified key barriers to adopting video-conferencing tools, including:

**Technological Infrastructure:** Limited access to high-speed internet was reported by 40% of respondents.

**Training Gaps:** Over 35% indicated insufficient training on tool functionalities.

**Cultural Factors:** Resistance to change due to hierarchical communication norms was cited by 25%.

**Table 4: Distribution of reported challenges.**

Challenge	Frequency	Percentage
Limited Internet Access	68	40%
Insufficient Training	60	35%
Hierarchical Norms	42	25%

## 5. DISCUSSION

### 5.1 Interpretation of Findings

The results underscore the critical role of UTAUT2 constructs in shaping the adoption of video-conferencing tools. Performance expectancy emerged as the strongest predictor of behavioral intention, consistent with prior research (Davis, 1989; Venkatesh et al., 2012). Participants recognized the utility of these tools in enhancing English speaking skills, particularly in improving fluency and confidence.

Effort expectancy also significantly influenced behavioral intention, highlighting the importance of user-friendly interfaces. This finding aligns with studies emphasizing the impact of ease of use on technology acceptance (Bailey & Lee, 2022). Social influence further reinforced behavioral intention, reflecting the impact of peer and organizational support in encouraging adoption.

Facilitating conditions, while less influential, still played a significant role. This suggests that while technical support and infrastructure are essential, their impact is mediated by users' perceptions of tool utility and ease of use.

### 5.2 Implications for Practice

The study provides actionable insights for enhancing technology adoption among Iraqi UN staff. Key recommendations include:

**Improving Infrastructure:** Investments in reliable internet connectivity and access to devices are critical.

**Comprehensive Training Programs:** Tailored workshops focusing on tool functionalities and communication strategies can bridge knowledge gaps.

**Organizational Support:** Encouraging leadership to model technology use and fostering a supportive culture can enhance adoption.

### 5.3 Limitations and Future Research

This study has several limitations. The cross-sectional design does not allow causality to be inferred. Sustained analysis of the impact of video-conferencing tools can also be performed, and used to deepen insights into longitudinal studies. The sample was limited as well, only to Iraqi UN staff which may limit generalizability of findings. The results are to be validated in diverse cultural and professional contexts by future research.

## 5.4 Comparative Context

Comparing these findings with similar studies in other regions reveals common barriers such as technological limitations and training gaps. However, the cultural nuances in Iraq, particularly hierarchical norms, present unique challenges that require tailored interventions. Understanding these differences can inform global strategies for technology adoption.

## 6. CONCLUSION

UTAUT2 is found to be an applicable framework to understand adoption of video-conferencing tools for the English-speaking skill development among a multicultural workforce. The research describes key predictors and barriers to technology adoption, thus helping to map the roadmap to improve its adoption. To realize the potential of improving communication proficiency through video-conferencing tools, you need to invest in infrastructure, provide targeted training, and support out organizations.

It contributes to the broader tool on technology adoption and points out the necessity of context specific strategies. Future research should explore longitudinal effects, extend contexts to diverse cultures, and integrate new technologies to the extent possible.

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