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# Cross-Cultural Effects in Adoption Patterns of a Mobile Coaching Service for Studies: A Comparison Between France and Mexico

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## ABSTRACT

This study applied an adoption model, inspired by the technology acceptance model (TAM) and multipurpose information appliances adoption model (MIAAM), to compare key variables explaining adoption patterns of a mobile coaching app that guides and encourages students via a technology-based platform. This article constitutes a pioneer effort to compare adoption behaviors across a developed country and an emerging country (France and Mexico) with differences in level of use of mobile apps. A multi-group structural equation modelling approach was used to test the causal structure of the conceptual model. Results confirmed significant differences and similarities across samples and identified critical factors. Perceived usefulness was found to be the most important driver with mediating effects. Organizations implementing coaching services with an improved perceived usefulness could boost their adoption rates.

## KEYWORDS

Apps, Cross-Cultural Comparison, France, Innovation, Mexico, Mobile Coaching, Perceived Usefulness, Structural Equation Modelling, Technology-Based Services

## INTRODUCTION

Higher education can be difficult and very often stressful because students must typically balance personal, professional, and academic issues simultaneously. Thus, they often require personal and professional advice and/or counselling to improve their performance, motivation, and self-confidence. This advice is usually provided by faculty, administrative staff, or peers. At this regard, information technology and mobile devices represent an opportunity to provide an innovative type of coaching based on digital features, which can be identified as e-coaching or m-coaching.

Mobile apps for coaching have been developed and applied in various fields such as sports and health, and mainly targeting young and digitized consumers. A mobile coaching service for studies may comprise content like videos of experts, along with links to forums and blogs in order for students to exchange views on personal experience with peers and professors and to get advice and links to the

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student's schedule in which homework and tasks may be prioritised. An e-mail or SMS alert system may help in starting to work for exams as it exists for other e-coachings like reminding about taking a medicine or smoking cessation. The academic literature examining online consumer behaviour is relatively underdeveloped (Forsythe, Liu, Shannon & Gardner, 2006; Smith et al., 2013) and dominated by Western perspectives utilizing U.S. based samples (Cayla & Arnould, 2008). The potential global spread of a mobile coaching service for studies requires a more systematic understanding of consumer behaviour in different countries. The aim of this paper is (1) to identify the antecedents of the intention to adopt a mobile coaching service for studies. (2) to measure the differences between an emerging economy and a developed country (Mexico and France). Among emerging economies, Mexico is chosen because it comes first in using mobile phones for learning something important for work or school (Silver et al., 2019). As developed country, France is selected because French people have a use of apps reasonably close to Mexicans' use (9.6 per user in Mexico and 12.4 per user in France). Both countries differ on political, economic, socio cultural, and regulatory issues that could influence technology adoption paths.

The study's conceptual model is grounded in the technology acceptance model TAM (Davis, 1989) and its modified version the Multipurpose Information Appliances Adoption Model (MIAAM) in Hong and Tam (2006). TAM is the most widely accepted framework for explaining user's decision to adopt and use information technology (Smith et al., 2013). To the authors' knowledge, these models have not yet been applied to mobile coaching service for studies adoption patterns nor in Mexico.

This study contributes in two ways. First, given the continued growth of smartphone apps across cultures this research provides insight into the use of technology adoption models across cultures within the framework of mobile coaching for studies. Hence it adds knowledge to three distinct bodies of existing literature (technology adoption models, mobile coaching and cross national and cross-cultural issues) providing a unique contribution to the management discipline. As reminded by Smith et al (2013), Cleveland et al. (2009) outline the importance of applying constructs and theories to new countries. Second, it offers empirical evidence to validate and compare an adapted technology acceptance model, applying a multi-group structural equation modelling approach in two countries with different economic and cultural dimensions. A measurement equivalence is conducted, indicating that the MIAM measures holds very similar meaning across Mexico and France.

This article is structured as follows. First, the authors introduce the theoretical framework, second the authors present the model and the hypotheses to be tested. Third, the authors describe in detail the methodology and the operationalization of variables. Forth, the statistical analyses and main findings are then explained. Next, the authors elaborate on the main results as well as the theoretical and managerial implications. After exploring some limitations and potential topics for future research, the authors do the closing of the paper.

## **THEORETICAL BACKGROUND**

### **Attitudinal Models Predicting Consumer Adoption of Technology-Based Services**

In past decades, a variety of theoretical perspectives have been developed to address adoption of IT innovations. One of the most widely used models is the TAM (Smith et al, 2013; Mortenson & Vidgen, 2016), which was originally proposed by Davis (1989). This model is based on the theory of reasoned action (Ajzen & Fishbein, 1980) and the theory of planned behaviour (1985). It identified two key variables, the perceived ease of use (PEU) and perceived usefulness (PU), as fundamental determinants of user acceptance (Mac Callum & Jeffrey, 2013; Venkatesh, Morris, Davis, & Davis, 2003). TAM has been tested across various technologies using student and non student samples from various countries. Within the Internet context, the TAM has been utilized to study technology adoption across numerous settings, including mobile Internet services (Jiang, 2009), online auctions (Stern, Royne, Stafford, and Bienstock, 2008), online trading (Lee, 2009) online games (Hsu & Lu,

2004), instant messaging services (Wang, Hsu, & Fang, 2004), email (McCoy, Everard, & Jones, 2005), and online banking (Gounaris and Koritos, 2008).

TAM is well adapted to innovations that do not yet exist (vicarious innovations), or that are in the early diffusion stages. Herein, vicarious innovativeness could be defined as the active search for information about new products or concepts without experimenting them directly (Pagani, 2007). In such cases, the intention to adopt such an innovation is more appropriate than its effective use (Hong & Tam, 2006). There are calls for better understanding motivational antecedents to TAM (Ruth, 2000; Venkatesh & Davis 2000; Smith et al., 2013).

Venkatesh and Davis (2000) have proposed and validated an adapted model (TAM2) in a workplace longitudinal setting, using measures such as subjective norms, image, job relevance, output quality, and result demonstrability. Further, Venkatesh and Brown (2001) identified key factors driving PC adoption processes. Among the factors identified were the social influence of friends and family members, as well as, cost and status, issues that had been ignored in previous organisational innovation research. The authors found that home PC adoption could be driven by a mix of utilitarian, hedonic, and social factors. Hong and Tam (2006) further developed this model to propose the Multipurpose Information Appliances Adoption Model (MIAAM) comprising four sets of adoption drivers:

1. General Technology Perceptions (Perceived Usefulness & Perceived Ease of Use)
2. Technology-specific Perceptions (Perceived Service Availability & Perceived Monetary Value)
3. User Psychographics (Perceived Enjoyment & Need-for-Uniqueness)
4. Social Influence & Demographics (Gender & Age)

Meta-analyses show considerable regularities and provide broad support for the TAM's theoretical underpinnings (Kind and He, 2006; Schepers and Wetzels, 2007; Smith et al., 2013). PEU and PU are the most important predictors of the intention to use a technology and PU is the most influential because easier-to-use technologies are perceived more useful as they need less learning.

### **Exploring m-Coaching as a Vicarious Innovation in the Higher-Education Ecosystem**

The world coaching was originally associated with sports (Moral & Angel, 2014). In this context, the coach is generally an ex-athlete with a long career in the area in question. His/her experience and charisma help the novice athlete to improve his/her performance and results. Professional coaches in the business world appeared in the 1990s. The International Coach Federation (ICF) defines coaching as a collaboration with customers that takes the form of a creative process that stimulates reflexion with the purpose to inspire them to optimize their personal and professional potential. According to ICF Global Coaching Study (2016) there are much more coach practitioners and managers using coaching skills in Western Europe (N=18 800) than in Latin America and the Caribbean (N=4000).

As phone and video conferences are nowadays carried through smartphones, the authors conceptualised mobile coaching or 'm-coaching' as: A relationship providing career and emotional support through e-mails and other electronic means on mobile phones (via SMS, MMS, social networks like Facebook and/or digital communication platforms such as Skype, WhatsApp, Facetime, Microsoft Teams, or Zoom).

Smartphone use is widespread in Mexico and France but more widely in France (average of apps in use per user: Mexico (9.6)-France (12.4), OECD, 2015, see Table 1).

Fraze (2008) studied 191 professionals and coaches, found advantages associated with asynchronous coaching tools, such as cost effectiveness, user friendliness, and confidentiality. He indicated that a technology-based service potentially provides better communication frequency and therefore, could establish an easier and even more interactive process than face-to-face coaching. Frazee highlighted that the obstacles usually associated with mobile coaching, such as the lack of

Table 1. Feature Comparison between Mexico and France

Similarities	Cultural dimension	Mexico	France
	Hofstede's cultural profiles	High Power Distance	
	GLOBE's cultural dimension	Medium Performance Oriented	
Differences	Cultural dimension		
	Hofstede's cultural profiles	Collectivism Indulgence Masculinity	Individualism Long-term orientation
	GLOBE cultural cluster GLOBE cultural dimension	Latin America Collectivism	Latin Europe
	Supporting data		
	Smartphone apps availability and usage	20.6 <sup>1</sup> (9.6 <sup>2</sup> ) Last third of countries	32.7 (12.4) First third of countries
	Tertiary level education among Population aged 25-34 in 2014	24.6%	44.1%
	Coaching practice Coach practitioners	Latin America and the Caribbean 4,000	Western Europe 18,800

Note: <sup>1</sup>Average of apps available per user; <sup>2</sup>Average of apps in use per user

direct visual contact with the coach, could be overcome by verbalising the process, and by paying attention to the subtle parts of conversations.

To the best of the authors' knowledge, there is no commercialised standard and worldwide app currently providing mobile coaching service for studies. Yet, students must often find their bearings in a new institution or a new country or must find the motivation to start and keep studying under pressure. Therefore, they need to be encouraged or counselled after receiving disappointing grades, or to be stimulated and reassured before examinations; be advised to prioritise tasks and handle multiple learning processes. The idea of this app was inspired by some other apps that automatically remind you about taking a medicine or encourage you to maintain your smoking cessation efforts. A prototype was too costly to develop. This paper may encourage some institutions to invest in such an app for their students.

## Influence of National Culture on Technology Adoption Patterns

In international marketing, culture is considered one of the most influential factors that affect consumers' motives, attitudes toward choices, intentions, and purchases on a global basis (Jarvenpaa, Tractinsky and Saarinen, 1999; Samiee, 2001). Baker, Al-Gahtani and Hubona (2010) apply TAM2 (Venkatesh & Davis, 2000) model among knowledge workers in Saudi Arabia. They consider cultural and social context in this country. Samiee (2001) even asserted, "the single most important factor that influences international marketing on the Internet is culture" (p. 297). Given the globalization of business, several researchers have examined technology adoption patterns across countries exploring the influence of national culture with Hofstede's framework (2010). For example, Straub, Keil, and Brenner (1997) compared Japan, Switzerland and the USA; Dinev, Goo, Hu and Nam (2009) analysed South Korea and the USA; Li, Hess, Mc Nab, and Yu (2009) examined China and the USA; Smith et al. (2013) compared Germany, Norway and the USA, Ashraf, Narongsak, and Seigyoung (2014)

**Table 2. Comparison of Hofstede's Cultural Dimensions (2010) and TAM**

Authors	Subject	Model	Country Studied	PDI	IDV	MAS	UAI	LTO	IND	CMSI <sup>1</sup>	MV <sup>2</sup>
(Ashraf, Narongsak & Seigyoung, 2014)	Online shopping adoption	Extended TAM with trust and PBC <sup>3</sup>	Canada	39 L	80 H	52 M	48 L	x	x	159	Y
			Pakistan	55 M	14 L	50 M	70 M	x	x	261	Y
(Smith et al., 2013)	Online shopping adoption	TAM with cognitive and affective involvement	Germany	35 L	67 H	66 H	65 M	83 H	40 M	199	Y
			Norway	31 L	69 H	8 L	50 L	35 M	55 H	120	Y
			USA	40 L	91 H	62 H	46 L	29 L	x	157	Y
(Dinev, Goo, Hu & Nam, 2009)	Behaviour towards Protective information technologies	Extended TAM via the theory of planned behaviour	South Korea USA (indirect effects only)	60 M	18 L	39 L	85 H	100 <sup>4</sup> H	x	266	Y Y
(Li, Hess, Mc Nab & Yu, 2009)	Acceptance of a personal web portal	TAM tested for entire survey (no comparison)	China <sup>5</sup> USA	80 H	20 L	66 H	30 L	87 H	x	256	
(Straub, Keil & Brenner, 1997)	E-mail use	TAM	Japan	54 M	46 M	95 H	92 H	x	X	295 <sup>6</sup>	N
			Switzerland	34 L	68 H	70 H	58 M	x	X	194 <sup>7</sup>	Y
			USA							157	Y
			France Mexico	68 H	71 H	43 M	86 H	63 H	48 M	226	
				81 H	30 M	69 H	82 H	24 L	97 H	302	
			Total Mean (std dev) <sup>8</sup>	59 (21)	45 (24)	49 (19)	68 (23)	46 (24)	45 (22)	231 (54)	

Note: PDI (Power Distance), IDV (Individualism), MAS (Masculinity), UAI (Uncertainty Avoidance), LTO (Long-Term Orientation), IND (Indulgence) and CMSI (Computer-based Media Support Index).

Scores are reported for H (top third), M (medium third), and L (bottom third), where x is the dimension not used in the articles.

1 CMSI = PDI+MAS+UAI+100-IDV was proposed by Straub et al. (1997) and was also used by Ashraf et al. (2014). We performed the calculations for the other countries. 2 Model Validated (Yes/No). 3 PBC: Perceived Behavioural Control. 4 75 in Dinev et al. (2009). 5 MAS=50, UAI=60 and LTO=118 in Li et al. (2009). 6 287 in Straub et al. (1997). 7 204 in Straub et al. (1997). 8 Calculated for 76 countries for the four first dimensions, and for 93 countries for the others.

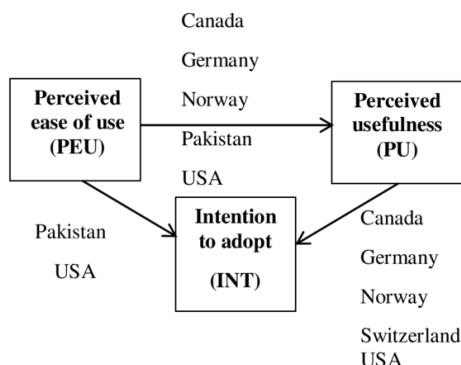
studied Canada and Pakistan. In these studies, the main factors (i.e., PEU and PU), explaining the technology adoption intention (INT) differed across countries. These findings highlighted the complex relationships between PEU, PU, and INT in each country analysed. A summary of these results is presented in Table 2 and Figure 1.

Hofstede's cultural dimensions (power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence) were used in these studies to justify and support their hypotheses and findings.

Ashraf et al. (2014, p.73) reported that "Hofstede's framework (Hofstede, 1980) is one of the most widely used in the fields of sociology, psychology, management and marketing". Though the dimensions were originally developed based upon employees of a global firm, further research has found that they well represent broad differences in national culture, and they help researchers understand how members of different societies behave in various situations (Smith et al., 2013).

Straub, et al. (1997) combined Hofstede's indices to create a 'computer-based media support index (CMSI). The purpose of this new index was to express the simultaneous effect of four Hofstede dimensions. The authors suggested adding power-distance, masculinity, and uncertainty avoidance to individualism, in keeping with their argument that individualism moves in the opposite direction from the other scales in its effect on perceptions and use of computer-based media. CMSI scores have been used to predict the adoption of consumer-oriented e-commerce across countries (van Slyke, Hao, Belanger, & Sridhar, 2010). Mexico has a higher CMSI (302) than France (226).

Figure 1. TAM model tested for different countries using Hofstede's cultural dimensions



Despite the wide use of Hofstede's theory in information system and marketing literature (Dinev et al., 2009; Pavlou & Chai, 2002; Straub et al., 1997; Srite & Karahanna, 2006), there have been criticisms (Li et al., 2009; Mc Sweeney, 2002; Myers & Tan, 2002; Srite & Karahanna, 2006). These criticisms have focused on the individual variation among people within a country as well as the dated nature of Hofstede's country scores, developed for the first four between 1967 and 1973.

In this regard, it is important to highlight that culture is relatively enduring over time, and Hofstede's indicators can be taken as: "A stable and slowly changing representation of culture and transcend generations" (Dinev et al., 2009, p.395).

Zhang et al. (2008) invite us to go beyond Hofstede's approach and use multi-framework in cross-cultural research. Hall (1976) for example isolates two dimensions of culture: context and time. Some cultures rely more heavily on context than others. This affects the way that people communicate and think (Hall, 1990). Low context communication occurs primarily through explicit sentences and documents. Most of the information has to be in the message to compensate for what is missing in context. Meaning in high-context cultures is conveyed more implicitly through the use of non spoken cues such as body language, eye-movement and silence (Wurtz, 2005; Smith et al., 2013). Context and individualism have a strong correlation (Hofstede, 1980). Low context countries tend to be individualistic.

Schwartz (1994) identified three basic societal issues: relations between individual and group, responsible social behaviour and the role of humankind in the natural and social world. His framework is defined by seven national-cultural domains that adapt to these issues: conservatism, intellectual autonomy, affective autonomy, hierarchy, egalitarianism, mastery and harmony.

## Exploring Mexican and French Cultural Settings

National culture, which refers to values, beliefs, traditions, and practices, could affect the way in which individuals perceive and interpret the world and the way they manifest themselves in different social, economic, education, and business settings. However, the authors acknowledge that within-culture variation between individuals may be more important than variation between cultures (Leonard, et al., 2011; Phinney, 1990; Trompenaars, 1994) and young people or students may be similar across borders (Keegan and Green, 2017).

The authors propose to compare the differences between an emerging economy and a developed country concerning the antecedents of the intention to adopt a mobile coaching service for studies. As mentioned in the introduction Mexico and France are selected because they have specifics features

(adoption of mobile apps). Both countries differ on political, economic, socio cultural, and regulatory issues that could influence technology adoption paths.

To provide greater cross-cultural control, the authors have compared Mexican and French cultural settings. Based on that, it could be noticed that in Hofstede's six-dimension model (6-D Model©) (Hofstede, 1993; Hofstede, Hofstede, & Minkov, 2010; Leonard, et al., 2011), Mexico and France were ranked differently in most categories. Mexico, with a score of 97, tended to be a much more permissive country than France (48). Thus, Mexican people tend to better enjoy life's indulgence and leisure time compared to the French, who seem to be less permissive and more restrained (Al-Shantaf, Nguyen, Mathai, & Steinberg, 2017). In the masculinity/femininity dimension, Mexico was positioned as a more masculine country than France (with a score of 69, versus a score of 43 for France). This could explain why Mexicans tend to be more competitive and to focus on profits and material gains. They also show lower long-term orientation than the French (24 versus 63); this could imply that Mexican society tends to focus on attaining results faster. This low long-term orientation could also reflect how Mexicans tend to use more traditional methods to handle their problems, whereas the French seem to be more pragmatic when handling difficulties (Al-Shantaf et al., 2017). Moreover, regarding individualism, France (71) scored higher than Mexico (30), which is characterised as a collectivistic society. This could explain the stronger bonds, such as family ties, that Mexicans tend to foster and nurture.

In summary, Mexico is a more masculine, collectivist, and indulgent society, while France is a more individualist and long-term orientated society. Both countries exhibit high power distance (68 for France; 81 for Mexico) and uncertainty avoidance (86 for France, 82 for Mexico). France has a higher context than Mexico (Hall, 1976) while Mexico is more polychronic than France (Hall, 1976). According to the GLOBE framework, which studied 61 nations and grouped them into 10 clusters (Javidan & House, 2001), Mexico and France are in two different cultural clusters (Latin America/Europe cluster). The GLOBE project examined nine cultural dimensions: uncertainty avoidance, power distance, collectivism I, collectivism II, assertiveness, gender egalitarianism, future orientation, performance orientation and humane orientation. House et al. (2002, p.6) have stated that: "The first six culture dimensions had their origins in the dimensions of culture identified by Hofstede (1980)." In the GLOBE project, Mexico and France still exhibit high power distance and uncertainty avoidance. Mexico is still positioned as a more collectivist society than France. In Globe project, performance orientation explains "the degree to which a collective encourages and rewards group members for performance improvement and excellence (House et al., 2002, p.6)." Mexico and France are medium performance-oriented countries. Therefore, the authors could expect that in both countries, students are encouraged toward excellence.

In the 7 Schwartz dimensions France is much stronger than Mexico regarding Affective and Intellectual autonomy and Egalitarianism (Schwartz, 2008).

A summary of the comparison between Mexico and France is presented in Table 1.

## RESEARCH MODEL AND HYPOTHESES

The research model is based on a simplified model of MIAAM. The perceived service availability and the need for uniqueness were not considered in this paper. Perceived service availability is defined as "the extent to which an information appliance is perceived as being able to provide pervasive and timely connections" (Hong and Tam, 2006). Today with the wide spread of smartphones, consumers are used to have application services available anytime and anywhere and there is not such need to assess this point. Need for Uniqueness is defined as "the individual's tendency to seek uniqueness through the adoption and use of symbolic products or innovations for the purpose of enhancing the self-concept" (Hong and Tam, 2006 p.167). Hong and Tam (2006) found the effect of Need for Uniqueness significant on the intention but insignificant on PU. Considering the context of a mobile coaching app for studies, this variable was not considered.



In the next sections, the authors will describe the direct relationships, moderating and mediating effects. Since the TAM relationships are already very well known in the information system literature, their relationships are not proposed here after as hypotheses in this research model. Instead, the other direct effects in MIAAM and the effects that are relatively “novel” (moderating and mediating effects) will be investigated in the model development.

## **Direct Effects**

### *Social Influence*

The scale Social Influence (SOCIAL) relates to what a person believes that those people who are important to him/her might feel about the behaviour (Ajzen & Fishbein, 1980). Students would perceive the mobile coaching service for studies as useful if others who influence the student’s behaviour thought they should use the mobile coaching service (Baker et al., 2010). SOCIAL has been shown to have a positive direct effect on Perceived Usefulness (PU) (Hong & Tam, 2006; Venkatesh & Davis, 2000) and the intention to adopt a technology (INT) (Hong & Tam, 2006; Venkatesh et al., 2003 in mandatory settings but not in volunteering settings). Therefore, the following hypotheses are formulated:

- H1. SOCIAL has a positive influence on PU for a mobile coaching service for studies in both countries.
- H2. SOCIAL has a positive influence on INT for a mobile coaching service for studies in both countries.

### *Perceived Enjoyment*

In consumer research, seeking pleasurable and joyful experiences is recognized as a basic personal desire (Rokeach 1973). Davis, Bagozzi and Warshaw (1992, p.1113) define Perceived Enjoyment (ENJOY) as: “The extent to which the activity of using an innovation is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated”. Hong and Tam (2006) have shown that ENJOY can exert direct as well as indirect effects via PEU (Perceived Ease of Use) and PU on mobile data service adoption intentions (i.e., INT). In the context of this study, a student who requires a reminder of study programs, homework deadlines, and examination dates, as well as encouragement, may be more interested in using this coaching service if it is perceived as being more enjoyable, pleasurable, fun, and interesting. This impression could be generated for example via videos, and infographics in the different blogs and forums and via an alert system as presented in the script (see Appendix).

Therefore, the following hypothesis is formulated:

- H3. ENJOY has a positive influence on INT for a mobile coaching service for studies in both countries.

### *Perceived Monetary Value*

Perceived Monetary Value (MONEY) is positively correlated when perceptions of quality are higher than perceptions of sacrifice (Monroe & Krishnan, 1985). In previous studies, this measure was found to affect consumer intention to adopt a product or service (Cronin Jr, Brady, & Hult, 2000; Dodds, Monroe, & Grewal, 1991). Notably, Hong and Tam (2006) demonstrated the positive influence of the perceived monetary value in the context of mobile data service adoption in Hong Kong. A mobile coaching service for studies may be free for students or charged. The following hypothesis is formulated:

- H4. MONEY has a positive influence on INT for a mobile coaching service for studies in both countries.

## **Moderating Effect of the Country**

The authors suppose that the country has a moderating effect on the research model. Precisely, the authors consider the below hypotheses focusing on the TAM part of the research model.

Several studies show that consumers from more individualistic cultures tend to have stronger desires for personal convenience suggesting a positive relationship between PEU and INT (Smith et al., 2013). For example, Ko, Roberts and Cho (2006) demonstrate that American subjects (individualistic low context culture) have a higher level of information and convenience motivations in using the Internet than did the Korean subjects (collectivistic, high context culture). Smith et al. (2013) show that the link between PEU and the intention to use online shopping sites is supported for the USA, a highly individualistic country, but for Germany and Norway the expected direct relationship is not significant. In these countries that are also individualistic but to a lesser extent the effect of PEU on the intention is fully mediated by PU. France is more individualistic than Mexico and has a lower context. Therefore, the following hypothesis is formulated:

H5. The positive relationship between PEU and INT for a mobile study coaching service is stronger in France than in Mexico.

Capitalising on previous research, Ashraf et al. (2014) argued that the importance of PU varies according to the stage of adoption of a technology. They supported that PU has a stronger direct positive effect on INT (to shop online) for a Canadian student sample (e-commerce already adopted) than for a Pakistani student sample (early- e-commerce adoption stage). In the same vein Mao et al. (2005) when testing the TAM using mobile Internet access, e-mail and online payments in the US and Turkey, report a significant relationship between PU and usage for the US sample but not for the Turkish sample (early adoption stage). Coaching and apps are in an earlier adoption stage in Mexico than in France as shown by the lower number of coach practitioners and smartphone apps per person. Therefore, the following hypothesis is formulated:

H6. The positive relationship between PU and INT for a mobile study coaching service is stronger in France than in Mexico.

## **Mediating Effects of Perceived Usefulness**

Considering the formulation of the hypotheses, the authors have added two hypotheses to test indirect or mediation effects.

Based on the assumptions that PEU has an influence on PU and that both of them have a positive influence on INT (TAM model), the authors should evaluate the moderating effect of PU. Davis et al. (1989) have shown that PEU affects indirectly (positive) INT through PU. The following hypothesis is stated:

H7. PU mediates the positive relationship between PEU and INT for a mobile coaching service for studies in both countries.

Moreover, based on the assumptions that the positive relationship between PEU and INT is stronger in France than in Mexico (H5) and the positive relationship between PU and INT is stronger in France than in Mexico (H6), the indirect effect of PEU on INT through PU could be stronger in France than in Mexico. The following hypothesis is stated:

H7a. The positive indirect relationship between PEU and INT for a mobile coaching service for studies is stronger in France than in Mexico.

Based on the assumptions that SOCIAL has an influence on PU (H1) and that both of them have a positive influence on INT (TAM model and H2), the authors should evaluate the mediating effect of PU. SOCIAL affects indirectly (positive) INT through PU (Hong & Tam, 2006; Venkatesh & Davis, 2000). The following hypothesis is stated:

H8. PU mediates the positive relationship between SOCIAL and INT for a mobile coaching service for studies in both countries.

As in Dinev et al. (2009, p. 397), France as South Korea has a low masculine culture “where individuals pay more attention to the opinions and behaviours of the others, in contrast to the more masculine cultures as Mexico (or US) where goal achievement is of greater importance”. Moreover, according to the assumption that the positive relationship between PU and INT is stronger in France than in Mexico (H6), the indirect effect between SOCIAL and INT through PU could be stronger in France than in Mexico. The following hypothesis is stated:

H8a. The positive indirect relationship between SOCIAL and INT for a mobile study coaching service is stronger in France than in Mexico.

According to the theoretical framework, Figure 2 shows the conceptual model to be tested.

## **METHODOLOGICAL APPROACH**

### **Data Collection**

Surveys of students enrolled in a business school in France and a business school in Mexico were conducted to collect data in order to test the theoretical model. The questionnaire, which was originally written in English, was translated into French and Spanish and double-checked by the authors and validated by a person who is proficient in the three languages. Next, both questionnaires were back-translated into English to avoid mistakes during the translation process. The questionnaires were designed to be self-administered and were placed online via Sphinx iQ2 online (a survey software) platform. Emails with a request to participate in the study were sent to French and Mexican students by their professors. Surveys remained online for 40 days, the completion time was around 10 to 15 minutes, approximately. Online respondents were exposed to the presentation of a mobile coaching service for studies, following a scenario-based approach (see Appendix).

According to Lancelot Miltgen, Henseler, Gelhard and Popovič (2016), previous research has shown that scenario-based approaches are well-suited for studying individual decision-making processes (Bateson & Hui, 1992; Seawright & Sampson, 2007).

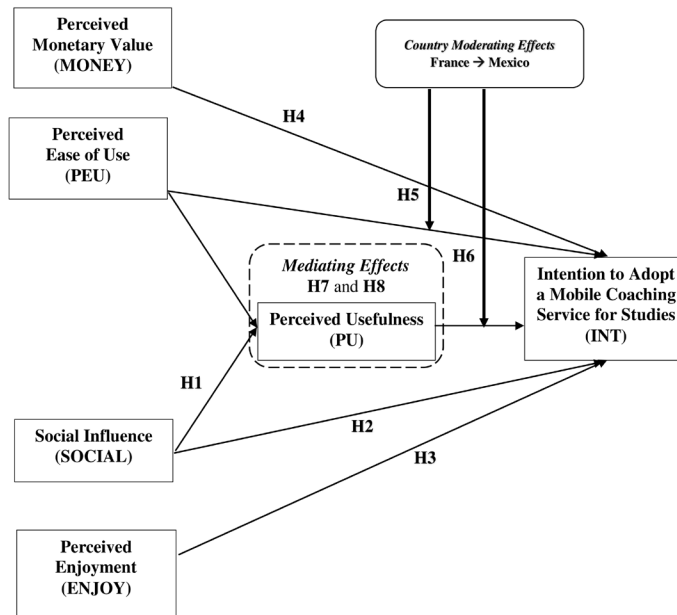
The final samples were composed of 259 Mexican and 201 French students. The data collected covered the demographic profile of participants, their mobile coaching service use and their opinion on mobile coaching for studies, for that the authors used multiple-choice questions (See Table 3 for demographic details by country).

### **Operationalization and Measurement Constructs**

Likert-type scales, composed of six items ranging from “Strongly disagree” to “Strongly agree,” were used to test the model’s variables. The operationalised variables are described in Table 4.

First, the authors studied the reliability and validity of the scales to assess the measurement instruments used to test the constructs. Second, the authors tested the measurement equivalence of scales between Mexico and France. Then, a multi-group structural equation modeling approach was used to test the causal structure of the conceptual model via AMOS. The moderating variable was the country, which was a dichotomous variable: Mexico and France. This allowed comparison of the

Figure 2. Research Model based on MIAAM (Hong & Tam, 2006)



Mediating effects:

**H7:** Perceived Ease of Use → Perceived Usefulness → Intention to Adopt Mobile Coaching  
(H7a: France → Mexico)

**H8:** Social Influence → Perceived Usefulness → Intention to Adopt Mobile Coaching  
(H8a: France → Mexico)

relationships among variables across different groups. The authors used the maximum likelihood fit function. In addition, following the recommendations of Anderson and Gerbing (1988), a two-step approach was used.

## MAIN RESULTS

### Reliability and Validity of Scales

Examination of the factor loadings revealed several problematic items. The loading factor of the item 1 in MONEY (France) was too low (0.12). The measure MONEY could not be improved, and it was removed (therefore authors were unable to test H4). The average variance extracted of ENJOY (France) was 0.48 with a low factor loading (item 4, 0.62). The authors decided to improve the construct ENJOY keeping only 3 items.

As shown in Table 5, on most scales, loadings were greater than 0.7. From a statistic point of view, loading higher than 0.6 are acceptable. The inner coherence of a measurement scale was ensured by the Cronbach's alpha reliability coefficient (>0.7). The Jöreskog's  $r$  coefficients were high for all scales (>0.7). Thus, each item was better explained by the related construct rather than by chance. Regarding the convergent validity, the weights of the relationships (between the measures and their construct) were statistically different from 0. The average extracted variance between each construct and its measures was higher than 0.5.

**Table 3. Demographics by country**

Descriptive Variables	Mexican Sample (N=259)	French Sample (N=201)
Mean age (std dev)	24.9 (1.6)	21.5 (2)
Gender		
Women	29%	56%
Men	71%	44%
Education level		
Undergraduate level	5%	18%
Graduate level	27%	31%
Postgraduate level	68%	51%

Relating to the testing of the discriminant validity, the analysis recommended by Bagozzi and Yi (1991) relies on a comparison of the chi-square values of the model to be tested. This approach allows the correlations between the different constructs to be free and facilitates a model where the correlations between the constructs are set to 1. If the difference in degrees of freedom is significant, it can be inferred that the tested model is better than the constrained model and that the constructs are different. In this study, these indicators used yielded satisfactory results (Mexico:  $\Delta\chi^2 = 110.409$ ,  $\Delta df = 10$ ,  $p = 0$ ; France:  $\Delta\chi^2 = 104.772$ ,  $\Delta df = 10$ ,  $p=0$ )

### Measurement Invariance

The authors must assure the cross-cultural equivalence of the measure across Mexico and France. As the intent of the study is to investigate theoretical relationships among variables, the authors consider only the partial metric invariance (invariance of factor loadings in [Steenkamp & Baumgartner, 1998]). In model A, the authors considered no constraints. In model B, the factor loadings were constrained to be equal across groups countries. The indicators were relatively satisfactory (RMSEA=0.062-0.064; NFI=0.889-0.891; CFI=0.926; TLI=0.909-0.914; and GFI=0.849-0.851, see Table 6).

The chi-square analysis was computed for both models (Model A and Model B). The measurement equivalence was then statistically tested by taking the difference in the two chi-square values which is itself a chi-square value. The difference of chi-squared values between the unconstrained model and the constrained model was not significant ( $\Delta\chi^2 = 13.489$ ,  $\Delta df = 13$ ,  $p=0.411$ ). These findings indicate that the partial metric invariance was supported.

### Structural Equation Modeling

#### Direct Effects

Table 7 presents the significant relations found from the research model using the structural equation approach. The model was tested for each country.

According to the results presented in Table 7, the perceived ease of use (PEU) significantly (positive) influenced the perceived usefulness (PU) in both countries (Mexico:  $\beta=0.636$ ,  $p<0.001$ ; France:  $\beta=0.447$ ,  $p<0.001$ ) and PU significantly (positive) contributed to the intention to adopt a mobile coaching service for studies (INT) in both samples (Mexico:  $\beta=0.645$ ,  $p<0.001$ ; France:  $\beta=0.982$ ,  $p<0.001$ ). The effect of PEU on INT for the mobile coaching service was not significant for either country. The positive impact of the SOCIAL on PU was found to be significant for both countries (Mexico:  $\beta=0.361$ ,  $p<0.001$ ; France:  $\beta=0.514$ ,  $p<0.001$ ; H1 was supported) but its influence on INT was not significant for either country (H2 was not validated). The positive impact of the ENJOY on INT was not significant for either country (H3 was not validated).

**Table 4. Concepts, Labels, Items, and Source**

Concept	Label	Item description	Adapted from
Intention to Adopt a Mobile coaching Service for Studies	INT	In the coming year, 1. I'll certainly try to use a mobile coaching service for studies that will support me, help me organise my reviews, and allow me to improve my performance. 2. I'll absolutely try to use a mobile coaching service for studies. 3. I'll certainly make an effort to try use a mobile coaching service for studies. 4. I plan to use a mobile coaching service for studies.	(Perugini & Bagozzi, 2001)
Perceived Usefulness	PU	1. Using this mobile coaching service for studies would increase my chances of achieving things that are important to me. 2. I would find this mobile coaching service for studies useful in my daily life. 3. Using this mobile coaching service for studies would help me accomplish things more quickly.	(Davis, 1989)
Perceived Ease of Use	PEU	1. I expect that learning how to use this mobile coaching service for studies will be easy for me. 2. I expect that my interaction with this mobile coaching service for studies will be clear and understandable. 3. I will find this mobile coaching service for studies easy to use. 4. I expect that it will be easy for me to become skilled at using this mobile coaching service for studies.	(Davis, 1989)
Social Influence	SOCIAL	People who are important to me would 1. want me to use a mobile coaching service for studies, if I required support with organisation of my reviews and to improve my study performance. 2. approve of me using a mobile coaching service for studies, if I wanted support with improving organisation of my studies and my study performance. 3. help me to use a mobile coaching service for studies. 4. encourage me to use a mobile coaching service for studies if I required support with organisation of my reviews and to improve my study performance.	(Perugini & Bagozzi, 2001)
Perceived Enjoyment	ENJOY	I expect that 1. using this mobile coaching service for studies will be enjoyable. 2. using this mobile coaching service for studies will be pleasurable. 3. to have fun using this mobile coaching service for studies. 4. that using this mobile coaching service for studies will be interesting.	(Davis, Bagozzi, & Warshaw, 1992)
Perceived Monetary Value	MONEY	1. I expect that this mobile coaching service for studies will have a reasonable price. 2. This mobile coaching service for studies will offer good value for money. 3. I believe that, at the right price, this mobile coaching service for studies would be good value.	(Dodds, Monroe, & Grewal, 1991)

Although the positive direct effects of PEU and SOCIAL on INT were not significant for either country, PEU and SOCIAL could have a positive indirect effect on INT (see the section mediating effects).

### *Moderating Effects of the Country*

Before testing the moderating hypotheses, the authors apply a procedure to see first if moderating effects are truly present and only then the authors deal with their direction.

The procedure recommended by Dabholkar and Bagozzi (2002) was used to assess the moderating effect of the country on the relations of the research model. Two tests were conducted based on four models. In Model A, the authors considered all regression weights constrained across the countries and error variances of the items for dependent variables were also constrained. In Model B, the regression weights were free, but error variances constrained. In Model C both regression weights and error variances were free. In Model D, the regression weights constrained but error variances are free.

Table 5. Reliability and Convergent Validity Results

MEXICO					
Construct	Item	Loading*	$\alpha$	Jöreskog $\rho$	AVE
INT	1	0.90	0.95	0.95	0.83
	2	0.94			
	3	0.89			
	4	0.91			
PU	1	0.83	0.83	0.84	0.63
	2	0.72			
	3	0.83			
PEU	1	0.81	0.84	0.85	0.59
	2	0.80			
	3	0.61			
	4	0.84			
SOCIAL	1	0.82	0.91	0.91	0.72
	2	0.79			
	3	0.89			
	4	0.89			
ENJOY	1	0.91	0.79	0.80	0.58
	2	0.68			
	3	0.66			
	4	**			
FRANCE					
Construct	Item	Loading	$\alpha$	Jöreskog $\rho$	AVE
INT	1	0.88	0.94	0.95	0.81
	2	0.88			
	3	0.88			
	4	0.96			
PU	1	0.81	0.85	0.85	0.65
	2	0.86			
	3	0.75			
PEU	1	0.78	0.81	0.81	0.52
	2	0.80			
	3	0.62			
	4	0.67			
SOCIAL	1	0.78	0.84	0.84	0.57
	2	0.69			
	3	0.71			
	4	0.82			
ENJOY	1	0.71	0.76	0.76	0.52
	2	0.77			
	3	0.67			
	4	**			

Note: INT (Intention to adopt the mobile coaching service); PU (Perceived Usefulness); PEU (Perceived Ease of Use); SOCIAL (Social Influence); ENJOY (Perceived Enjoyment). AVE: average variance extracted. \* standardised item loading. \*\* Item is not considered. See Table 4 for details on the items.

**Table 6. Measurement Invariance Results**

Statistics	Model A Unconstrained	Model B Measurement weights
RMSEA	0.064	0.062
NFI	0.891	0.889
CFI	0.926	0.926
TLI	0.909	0.914
GFI	0.851	0.849
$\chi^2 / df$	2.868	2.777

The indicators were relatively satisfactory (RMSEA=0.064; NFI=0.886-0.889; CFI=0.922-0.924; TLI=0.908; and GFI=0.847-0.850, see Table 8). The chi-square analysis was computed for all models.

On the one hand, the authors obtained that Models A and D were not significantly different ( $\Delta\chi^2 = 4.387$ ,  $\Delta df = 2$ ,  $p=0.112$ ) and Models B and C were not significantly different either ( $\Delta\chi^2 = 4.770$ ,  $\Delta df = 2$ ,  $p=0.092$ ). These results indicate that error variances do not cause significant differences across Mexico and France. Also, the authors obtained that Models A and B were significantly different ( $\Delta\chi^2 = 16.100$ ,  $\Delta df = 6$ ,  $p=0.013$ ) and Models D and C were significantly different ( $\Delta\chi^2 = 16.483$ ,  $\Delta df = 6$ ,  $p=0.011$ ).

The moderating effect of the country was validated. The authors can now consider the moderating hypotheses H5 and H6.

H5 was not supported because as the authors mentioned the effect of PEU on INT for the mobile coaching service for studies was not significant for either country. The positive impact of PU on INT is stronger in France than in Mexico ( $p<0.10$ ); H6 was supported.

### ***Mediating Effects of Perceived Usefulness***

The authors consider now the last hypotheses concerning the mediating effects of the variable PU (Table 9).

Table 9 summarises the results of the hypothesised mediating (indirect) effects. The authors used a bootstrapping approach suggested by Preacher and Hayes (2008) to examine the indirect effects of PEU and SOCIAL on INT via PU. The authors found that the expected positive indirect effects of PEU and SOCIAL on intention to adopt the mobile coaching service through the mediation of PU were significant because the confidence intervals do not contain zero (H7: Mexico:  $\beta=0.410$  [95% CI:0.080 to 0.964]; France:  $\beta=0.447$  [95% CI:0.241 to 0.736] and H8 were supported). The

**Table 7. Structural model results (direct effects)**

Effect	Mexico	France
PEU → PU	0.636***	0.447***
PU → INT	0.645***	0.982***
SOCIAL → PU	0.361***	0.514***

Note: INT (Intention to adopt the mobile coaching service); PU (Perceived Usefulness); PEU (Perceived Ease of Use); SOCIAL (Social Influence). Standardized coefficients and significant coefficients are reported: \*\*\*  $p<0.001$



**Table 8. Structural Equations Results for Moderating Effects Models**

Statistics	Model A	Model B	Model C Unconstrained	Model D
RMSEA	0.064	0.064	0.064	0.064
NFI	0.886	0.888	0.889	0.887
CFI	0.922	0.923	0.924	0.922
TLI	0.908	0.908	0.908	0.908
GFI	0.847	0.849	0.850	0.847
$\chi^2$	752.534	736.434	731.663	748.147
df	260	254	252	258
$\chi^2 / df$	2.894	2.899	2.903	2.900

mediating effects of PU were validated. It deals with full-mediating effects as the direct effects were not supported. The moderating impact of the country was only significant for the indirect relationship between SOCIAL and INT (H8a supported,  $p < 0.10$ ; H7a not supported,  $p = 0.34$ ). The positive indirect relationship between SOCIAL and INT is stronger in France than in Mexico.

## DISCUSSION AND IMPLICATIONS

The results show that for both countries, perceived ease of use (PEU) and social influence (SOCIAL) affected positively how participants perceived the service's usefulness (PU) and PU influenced positively the intention to adopt the mobile coaching service for studies (INT). However, the dimensions ENJOY, SOCIAL, and PEU did not directly influence INT.

PEU and SOCIAL had only a positive indirect effect on the intention to adopt through the perceived usefulness of the service. This may be similar to the findings of Venkatesh and Davis (2000) in a workplace context which showed only an indirect effect of social influence on intention to adopt voluntary systems. These authors posited that social influence could affect perceived usefulness in the workplace in two ways, one in which people incorporate their own usefulness perception to gain status and the other via their influence within their own work group to improve their job performance. In this case using the mobile coaching service for studies can help students gain status among their peers.

The effect of PEU on INT for the mobile coaching service was not significant for either country. This may be linked to the fact that in both countries people use mobile apps and know that they are easy to use.

The lack of influence of ENJOY on INT may be associated to the functional purpose of the coaching app, focusing on study improvement, and not offering immediate gratifications or fun or to the fact that this service was only presented with a script (vicarious innovation) where enjoyable gimmicks could not be shown. The scale MONEY was not validated perhaps because students could have difficulties to associate the money value of an imagery product, especially a mobile service where many free and freemium business models exist.

Considering the moderating effect of the country, as expected, the positive impact of PU on the adoption intention was stronger in the French sample. This finding may be a result of cultural differences because the Mexicans have short-term orientation and more indulgence. Also, French

**Table 9. Mediating Results (95% confidence interval)**

	Mexico			France			Validated hypothesis
	Value	Lower	Upper	Value	Lower	Upper	
PEU → PU → INT	0.410	0.080	0.964	0.447	0.241	0.736	H7
SOCIAL → PU → INT	0.233	0.032	0.537	0.514	0.338	0.738	H8 and H8a

Note: INT (Intention to adopt the mobile coaching service); PU (Perceived Usefulness); PEU (Perceived Ease of Use); SOCIAL (Social Influence). Standardized coefficients are reported.

autonomy is higher than Mexican (Schwartz, 2008) so they make decisions in a more independent way. This may also be due the fact that Mexicans have fewer coaching practitioners and in average less apps on their smartphones, so are in an early adoption stage for m-coaching (Ashraf et al., 2014). The observed cross-national difference concerning the impact of PU on INT may be explained by these confounding factors (cultural and economic). As expected, the positive indirect relationship between SOCIAL and INT is stronger in France than in Mexico. This result confirms again Dinev et al. (2009)'s finding for a low masculine culture like France in comparison with Mexico. Ko et al. (2006) also found that Korean subjects (more feminine culture than the US) showed a lower level of social interaction motivation than did the American subjects in using the Internet. Therefore, an app that has not a direct social encounter with people may be preferred in such countries. Globally, there is a moderating effect of the country highlighting the importance of perceived usefulness in such a service.

### Theoretical Implications

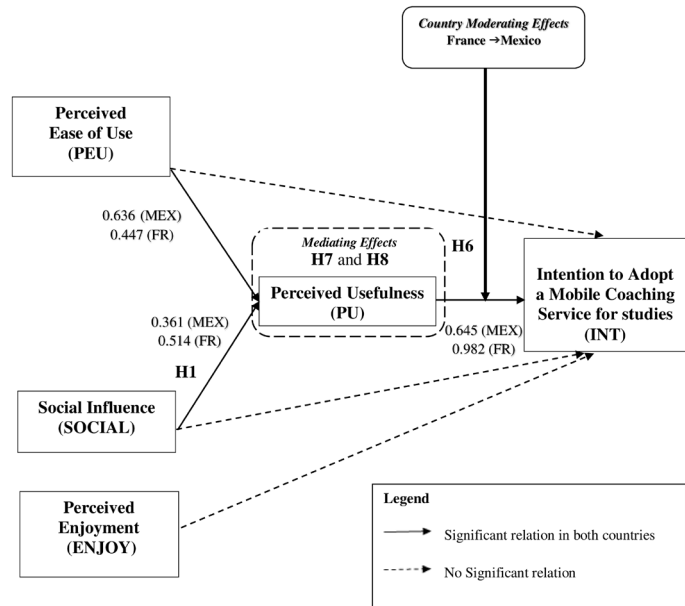
This research is a crossroads between marketing and education. The theoretical framework proposed builds on the Multipurpose Information Appliances Adoption Model (Hong & Tam, 2006), cross-cultural dimensions and adoption stages of a product (Mao et al., 2005; Ashraf et al., 2014). It explores adoption patterns of an innovative coaching service that could be provided by educational institutions: a mobile coaching service to help students to get support and better organise themselves during their studies. The authors compared adoption patterns in a developed country (France) and an emergent market country (Mexico) with different cultural, economic, political dimensions and different adoption levels of coaching practitioners and apps. A measurement equivalence was conducted, indicating that the MIAAM measures hold very similar meaning across these two countries. Thus, future researchers investigating these constructs within Mexico and France can be more confident in their findings.

The proposed theoretical framework validates part of MIAAM for a new country Mexico in the framework of a new technological service, a mobile coaching service for studies. It could inspire other researchers to assess adoption patterns of other technology-based services that could enhance the learning experience in universities and in corporations. Taherdoost (2018) pointed out the recognised and increasing interest among academicians and managers to identify key factors driving users' acceptance or rejection of new technologies and mobile services.

Also, this study has responded to the call of several authors for more research on TAM and innovation diffusion theories in settings outside the US to better comprehend how technology could be embraced, by individuals across countries (Lichy, Kachour, & Khvatova, 2017; Vannoy & Palvia, 2010). Existing adoption models were validated, adding a comparison in two different country settings. TAM has been further explored through a cultural perspective (Lichy et al., 2017; Vannoy & Palvia, 2010).

A constraint that deserves to be noted is that Hofstede's cultural dimensions used in this study were not measured at the individual level but were considered at the global level for each country.

Figure 3. Final Validated Model (standardized coefficients)



Mediating effects validated:

**H7:** Perceived Ease of Use → Perceived Usefulness → Intention to Adopt Mobile Coaching

**H8:** Social Influence → Perceived Usefulness → Intention to Adopt Mobile Coaching

(H8a: France → Mexico)

National culture was above an individual approach, and as such, individual perception of this construct was not considered (Bogatyreva et al., 2019; Smith, et al., 2013). In that direction, future research will need to be aware that the cultural context could have elusive and influential effects on users' adoption patterns.

## Managerial Implications

This research could lead to an interesting reflexion and implications for practitioners. The importance of coaching students to cope with academic pressure and helping them develop effective time management and working practices cannot anymore be ignored, specially at an early stage of an individual's high-education life or when they are facing personal crisis. At this regard, having access to a mobile coaching service could be of great help and guidance to solve critical matters.

There are several issues at the managerial level that organisations must take into consideration when they decide to implement and offer these mobile coaching services. In the following paragraphs some of these issues will be assessed.

Social influence and perceived ease of use impact perceived usefulness. And perceived usefulness impacts the intention (higher for France than for Mexico). An app provider that is aiming to expand globally has to adapt this app to effectively satisfy consumers' needs in different countries. This mobile coaching service for studies has to be made very useful for students, especially in a country with low masculine dimension like France and where coaching practitioners and apps are well developed. The authors proposed that students have an access to forums and blogs, to exchange views on their personal experience and to get advice from peers, professors and coaching practitioners. Professors and coaching practitioners from different countries have to be mobilised to give online conferences about how to manage intense academic workload, how to prioritise tasks before an exam, how to manage if there are points in the programs that students do not understand. The service will be useful if the student gets personalised answers but also if it is well linked to his/her agenda in which exam dates and due dates for homework are listed.

This part of the service was inspired from apps that remind everyone about taking a medicine or encourage everyone to maintain his/her smoking cessation efforts. Humorous messages can help in starting work. Robert and Wilbanks (2012) suggested that the use of humour may enhance better mentoring relationship quality. Humour-based messages could stimulate the coached person in a more pleasant way. Indeed, fun encouragement alerts could also be used during final examinations or tests to diminish stress and create a more friendly environment for students.

At the design and communication level, as perceived ease of use does not seem to have a direct influence on the adoption intention, managers or institutions desiring to introduce a mobile coaching service for studies may design and advertise it by placing greater focus on its entertaining and challenging features, and not only, on its functional features, especially for indulgent countries like Mexico.

## **LIMITATIONS AND FUTURE RESEARCH**

This study has several limitations reflecting areas of improvement and potential new avenues for future research. First, convenience samples were used which limit the results generalization. Also, participants from the two countries analysed differed in their age range and gender proportions. In Mexico, students were older than the ones in the French sample, which implies different levels of maturity and experience. Although, participants' academic levels were collected, it was not asked if these students considered themselves to be succeeding or having difficulties in their studies. This is an important issue to be considered in future studies.

Plus, respondents were only exposed to a script describing the mobile coaching service for studies (vicarious innovativeness) and therefore, they did not interact with a real coaching app. This aspect could have influenced their perception of the app's usefulness. However, Pagani (2007) argued that vicarious innovativeness can be useful when an actual service does not currently exist and can only be described, as is the case of this study.

Moreover, this type of innovation has been empirically linked to adoption attitudes towards services delivered via mobile devices. More accurate results would have been obtained if participants would have experimented with a real app and would have received counselling from a human coach, with whom they could interact virtually. Hence, there is a need for more experimental protocols to be tested in the future across different research settings and countries. But establishing such research protocols with a more realistic scenario could be more expensive and time-consuming.

## **CONCLUSION**

In this study, a conceptual model was tested explaining the influence of perceived usefulness, perceived ease of use, social influence, perceived enjoyment, and perceived monetary value on the intention to

adopt a mobile coaching service for studies, comparing adoption patterns in two different samples from Mexico and France.

The adapted MIAAM model was confirmed for the two samples tested. Findings confirm differences between the two countries. The perceived ease of use and the social influence impacted how participants perceived the mobile coaching service's usefulness and the perceived usefulness affected the intention to adopt this type of technology-based service. The perceived ease of use and the social influence only showed an indirect effect on the adoption intention through the perceived usefulness of the service. The positive impact of the perceived usefulness on the adoption intention was stronger in the French sample (explained by confounding cultural and economic factors) as in accordance with previous research for online shopping comparing Canada and Pakistan (Ashraf et al, 2014).

More research is still needed to further understand the adoption patterns of technology-enhanced services across cultures. Likewise, future research could expand the scope of this research to mobile coaching/counselling services for executives in the corporate world or individuals in need, such as patients or workers under stressful or challenging conditions.

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## **ENDNOTE**

- <sup>1</sup>. A specific item is “Students are encouraged (should be encouraged) to strive for continuous performance.”

## **APPENDIX: DESCRIPTION OF THE MOBILE COACHING SERVICE PROVIDED IN THE SCRIPT**

A link to the script was sent by professors to the students with an accompanying e-mail containing the following message:

Dear student, we propose that you to fill out a questionnaire for international academic research on the use of a mobile coaching service for students. In this questionnaire, we present a mobile coaching service for studies that you can have on your mobile phone that reminds you of the programs to study, deadlines for homework to make, examination dates and encourages you. Therefore, it supports you, helps you in organizing your revisions, and allows you to improve your performance.

Moreover, you can access to forums and blogs, to exchange views on your personal experience and to get advice.

There will also be an e-mail or SMS alert system, which will help you in your efforts to start working for your next class, to prepare for your exams and to meet your homework submission deadlines...

Example of message from the mobile coaching service for studies:

Are you ready? You have an exam tomorrow, let's revise...

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