Will the marketing educators have intention to continue using Game-Based Pedagogy post the COVID-19 pandemic?

Mallika Srivastava
NMIMS University Bangalore, India

Mudita Sinha
Christ University Bangalore, India

ABSTRACT

The COVID-19 disease outbreak has resulted in governments around the globe taking action to put in place unparalleled methods for a response. One of the worst hit sectors is education. As campuses across countries started shutting down abruptly, online education was needed quickly and prompted educators to adopt different pedagogies. Marketing educators generally are that cohort of academics who are most used to changing materials and processes due to the agile nature of markets and to make students industry ready. This research therefore incorporates a mixed method approach to identify the experience marketing educators had while incorporating Game Based Pedagogy (GBP) in marketing education during the pandemic and the determinants of continuance intention to use the same, post the pandemic. Semi structured interviews were conducted to reflect on the experience of marketing educators on GBP and data were analysed using content analysis, to identify various themes post which quantitative research was conducted to identify the determinants of continuance intention for using GBP post pandemic. The findings highlight the positive and negative experiences of marketing educators associated with GBP and important determinants of continuance intention.

Keywords: *Game based pedagogy; marketing educators; COVID-19, pandemic; continuance intention.*

INTRODUCTION

The coronavirus known as COVID-19 started propagating from China and other part of the globe from December 2019. The COVID-19 disease outbreak has ended up leading governments around the world to put in place unparalleled methods for response, and one of the worst hit sectors is Education. The campuses across countries started shutting down abruptly fearing the pandemic. Social distancing requirements led to rapid amendments in the higher education sector delivery practices as most of the educational institutions unexpectedly moved from off line classes to online classes via different digital platforms (Zimmerman, 2020). This facilitated the continuity of learning during this difficult period, providing education to millions of students leading to the emergence of different pedagogy to ease online learning (Govindarajan & Srivastava, 2020).

COVID-19 presented a classic adaptive and transformative challenge for marketing educators with no preconfigured playbook which could guide suitable responses. But marketing educators are one of that cohort of academics who are used to changing materials and processes due to the agile nature of markets and to make students industry ready (Kenneth et al., 2001). Marketing educators have long understood that those didactic methods will solely not be enough for the subject content (Dennis, 2004). Marketing subjects should not be taught only with lectures and reading material but must engage students in active learning. Game Based Pedagogy (GBP) has been used as an active learning method as it provides marketing concepts in a very interactive way, which otherwise

will be difficult to bring to the classroom. It focuses on learning with games and is slowly becoming an important part of modern teaching practice. It leads learners to uncover new techniques of working towards attaining goals in an interactive way. Research has been conducted on teacher competency for GBP (Nousiainen et al., 2018), the advantages and disadvantages of GBP (Elliott, 2014), and supporting teachers to adopt game based pedagogy (Emin-Martinez & Ney, 2013). However there are limited research on identifying the experience of marketing educators in GBP. This gap has been addressed by the Engagement Mode model (EM-model) consisting of three interrelated topics including a subject (the user of technology) who interacts with an object (any technological tool) and the interrelated topics, namely, extents in engagement methods; how heights on these magnitudes are joint to form engagement methods; and how engagement methods are associated with the flow experience.

No doubt, GBP gained importance in marketing education for engaging and motivating students during the pandemic, and GBP will continue to gain popularity and will slowly become a standard component of not only marketing curriculum, but also teaching and learning in general. One important question to be answered is whether the incorporation of GBP served only to break the monotony of online classes during the pandemic, or are marketing educators excited to use GBP and have continuance intention (CI) for incorporating GBP post pandemic as well? GBP demands interaction and participation that brings challenges for educators in catching students' attention (Florenthal, 2019). But the CI of GBP usage has not been addressed by most of the researchers which is a gap for the study. This gap is addressed by Self-Determination Theory (SDT), Technology Acceptance Model and its extensions, the Theory of Planned Behaviour and the Expectation–Confirmation model (Li & Yu, 2020). Marketing educators are perpetual learners who constantly update technical skill and pedagogies in class.

The pandemic brought about an abrupt, compulsory, and extensive switch to online teaching and there was expectation to use different online teaching tools by all the educators, resulting in the addition of a new approach of GBP to the teaching tools for many marketing faculties worldwide. This resulted in probably the biggest exercise ever which enhanced the faculty skills with real-time experiential learning in the virtual classrooms. The increased appetite of educators for further involvement of GBP is expected to continue post-COVID-19. Hence the objective of this study is to highlight the experience of marketing educators using GBP during the pandemic and to identify the most observable determinants for CI of using GBP post pandemic.

THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

The present study utilized two key areas of thought: Game-Based Pedagogy (the background for the research) and Continuance Intention (the explored phenomenon).

Game-based pedagogy (GBP)

Nousiainen et al., 2018 defined GBP in the context of a pedagogy established on diverse game-based methods. The first approach is the use of educational games intended specially to discourse certain purposes and reach definite outcomes (Dondi & Moretti, 2007). An alternative approach is adoption of entertaining games which are not intended primarily for education purposes, hence require more participation of the educators. Another method to execute GBP is learning by developing the games (Hwang et al., 2013). The fourth approach is using game rudiments in non-game settings. Various elements of games engage the learners and make the non-game activity more attractive and interesting (Farber, 2015). The characterization presents GBP both in digital and non-digital frameworks. However, the research context for the present study is in the digital context and we are adopting the fourth approach of GBP defined by Nousiainen et al., (2018) as "Gamification". The concept of gamification in teaching has been recently studied by Bado (2019). Bado's study had elicited the importance of integrating digital games in pedagogy. The study confirmed the involvement of educators in instigating a multiplicity of instructional strategies at the pre-game, game, and post-game phases. Gamification is one of the topical entrants in the history

of games comprising of business simulation; innovation and design games; role-play as leadership training; training; and recruitment (Hamari et al., 2015). Robson (2019) had also conducted gamified exercises to study its impact on motivation of students. The literature has also reinforced the use of marketing simulation games in business programs with respect to experiential learning theory connecting student satisfaction to learning outcomes (Caruana, et al., 2016).

Considering the definition of GBP by Nousiainen et al., (2018), we would define GBP as pedagogy established on gamification, embraced for teaching any marketing course at the postgraduate or undergraduate levels. However, to study the experience of marketing educators in adopting GBP, the EM-model was adopted. The EM-model assumes that when a subject (educators using GBP) is involved in an activity with an object (GBP), they perceive this on three fundamental bipolar dimensions: (a) Evaluation dimension, that is, the extent to which GBP is positive or negative; (b) Locus of control dimension, which means the level to which educator (subject) has control over GBP (object) or the object controls subject; and (c) Focus of motivation dimension, which explains the degree to which activity is engrossed on goals integral in the activity itself or on external goals.

Continuance Intention (CI)

Earlier research has explored educator adoption of technologies from various perspectives, such as, complexity of the technology (Aldunate et al., 2013), educator attitudes towards technology (Albirini, 2006), educational ideologies (Kiraz & Ozdemir, 2006), and overall technology acceptance (Šumak et al., 2011). The literature on educator's adoption of technology has shown inconsistency in results related to context, technology and types of users. Continuance refers to a method of post adoption behaviour. Although the term post-adoption designates a usual behaviour of initial acceptance - including continuance, assimilation, adaptation, infusion, and routinization - in the literature it is regularly addressed as a synonym for continuance. In this paper, we focused on CI as the explored phenomenon (dependent variable). The study on educator's CI has been mainly grounded on several theories and models, such as Self Determination Theory, the Technology Acceptance Model and its extensions, the Theory of Planned Behaviour and the Expectation–Confirmation model (Li & Yu, 2020). These theories and models have provided knowledge in formulating the hypothesis for the current study.

Hypothesis development

Technology acceptance model (TAM) developed by Davis (1985) has been most widely embraced to study the adoption of new technology for various educational purposes. TAM takes its roots from the Theory of Reasoned Action (TRA), which was developed by Fishbein and Ajzen in 1975. TRA postulated that an individual's performance is determined by his behavioural intention, which is dependent on his attitude and various subjective norms. Subjective norms are the social pressure from the others to behave in a specific way. TAM has been directly applied in various educational contexts such as online education and mobile learning (Liu et al., 2010). However, TAM has been extended by various researchers to incorporate some unexplored dimensions like computer self-efficacy, adopted from Self Determinant Theory (SDT), to predict usage intention (Roca et al., 2006). SDT was proposed by Ryan & Deci (2000) and was later adopted by Hollett et al., (2020) to study post-adoption behaviour.

Venkatesh et al., (2003) introduced some more dimensions in the TAM model, such as performance expectancy, effort expectancy, social influence, and facilitation conditions. This model was named as Unified Theory of Acceptance and Use of Technology (UTAUT). Facilitating conditions have been defined as various technical and administrative arrangements that will support IT systems. (Zarafshani et al., 2020). Similar research was conducted by Waheed & Jam (2010) by applying TAM to the study of educators and confirmed support of facilitating conditions for enhanced productivity of e-learning technology.

Along with self-efficacy and facilitating conditions, other dimension, which are overlooked but play an important role in user acceptance of technology, is "emotions" (Zhang & Li, 2005). Thus, three approaches, which have been proposed to be adopted in TAM are perceived enjoyment, flow, and perceived playfulness. Csikszentmihalyi (1977) had introduced the concept of flow and defined it in the context of the holistic experience that people feel when they act with total involvement. This concept was further elaborated by Hong in 2016. He defined Flow in the context of a subjective state of mind which is experienced by users when they are completely engrossed in any activity. According to Hong the individuals who are in a state of flow will operate at their full capacity and will focus on increasing the learning progress. These contexts evidently categorize flow as an intrinsic motivation comprising of three core conducts. First is absorption, which specifies individuals are occupied in the task with complete attentiveness. Second is enjoyment, which specifies positive state of mind, and finally intrinsic motivation which specifies individuals' execution of this task for their intrinsic motivation and not with expectation of external rewards (Nielsen & Cleal, 2010). However, in the past, flow had also been deliberated in the background of information technologies and has been endorsed as useful in learning consumer behaviour (Novak et al., 2000). Therefore, in the existing study, flow is defined as an enormously enjoyable experience, where users (teachers) engross in an on-line game activity with total engrossment, pleasure, control, attentiveness and intrinsic interest (Hsu et al., 2004). Recently, the construct of flow has been explored as a moderating variable in different contexts. It was adopted as a moderator in the context of m-shopping adoption by Chang et al., (2019) whose study confirmed that flow experience significantly moderates the relationship between trust in physical stores and m-shopping decisions. Earlier, Dong et al., 2017 also explained the existence of cognitive and affect experience as moderating variables in the context of usage of Internet of Things. Liao et al., 2008 verified the moderating effect of experience using the extended TAM model. However, the effect of flow experience as a moderating variable is unexplored in the context of GBP.

Hence the proposed Hypotheses for the study are:

H^1: Self-efficacy has impact on educator's CI for GBP.
H^2: Facilitating conditions has impact on educator's CI for GBP.
H^{3a}: Experience moderates the relationship between self-efficacy and CI to use GBP
H^{3b}: Experience moderates the relationship between Facilitating conditions and CI to use GBP
H^{3c}: Experience moderates the relationship between technostress and CI to use GBP
H^{3d}: Experience moderates the relationship between Relevance and CI to use GBP
H^{3e}: Experience moderates the relationship between Attention and CI to use GBP

CI is considered as one of the substantial factors in perceiving educators' post-acceptance behaviour (Hooi & Cho, 2017). There are various studies that explored the educators CI for online teaching in different settings and focused on experience, skills, emotions, gender, age and attitude (Lee et al., 2020; Mumford & Dikilitaş, 2020; Calafato & Paran, 2019). Nevertheless, studies on the CI to use online education are still inadequate (San-Martín et al., 2020). Some studies have researched self-efficacy (Dai et al., 2020), and perceived competences (Oduor et al., 2021) as predictors of CI in online teaching, while ignoring negative emotions (exhaustion, technostress). However, Bai et al., 2019 combined TAM, value-expectancy theory, and learning perspective to recommend a model to study educators' CI to use ICT in teaching, establishing that ICT, self-efficacy and facilitating conditions were positively allied with continuance intention.

The Job Demands-Resource model (JD-R Model) by Bakker & Demerouti, 2007 posited that when there are high demands in jobs with less positives it would lead to stress and burnout. However, if there are certain type of job positives it will not only counteract the effects of extreme job demands, but also encourage motivation and engagement among the employees. In the context of education, the model assumes that health and wellbeing of the educators are the result of balance between positive resources and negative demands (Schaufel et al., 2014). The JD–R was adopted in many

preceding studies to explore the negative outcome variables, such as burnout, stress, and poor health (Bakker et al., 2007). The current era of the pandemic has led to high work demands and poor resource availability among educators leading to increased technostress (Panisoara et al., 2020). Technostress is well-defined as a problem of inadequate adaptation when people are not able to deal with technological advancements and deviations required to use technology. This leads to psychological and physical stress. Research on technostress has been primarily administered in the industrial and government sectors as compared to the education field. In a recent study, Li & Wang (2020), focused on university educators and confirmed that university educators undergo pressure with respect to bringing innovation in teaching, and updating knowledge and skills, resulting in enormous job pressure. Lack of technological support, inadequate infrastructure and unavailability of training generates anxiety and stress and was associated with the use of technology among educators during the pandemic (Li & Wang, 2020). Other possible causes conveyed by educators were extra hours put in for preparation of online classes, unexpected errors, low reliability of technology and lack of training for adopting new technology. As a result, educators faced multiple negative symptoms, such as headaches, fatigue, sadness, or nervousness (Panisoara, et al., 2020). There is no preceding study that has adopted the JD–R model to explore the immediate and simultaneous effects of educators' technostress (Bottiani et al., 2019) on their CI for GBP.

Hence the proposed hypotheses for the study:

H[4]: Technostress has impact on educator's CI for GBP.

Keller's ARCS model (Keller, 1987) is one of the most extensively cited theories of motivation which has been adopted in the context of education. Keller's ARCS model has been formerly established in computer-based learning and gamification contexts (Su & Cheng, 2015). Therefore, it is broadly acknowledged that the model is appropriate to examine motivational subjects in gamification contexts (Astleitner & Wiesner, 2004). It asserts the motivational drivers of individuals as, attention, relevance, confidence, control, and satisfaction. Relevance of teaching material and capacity of teaching material to draw students' attention are considered as key factors in the overall learning process hence, the confidence and satisfaction factors are not being considered for the present study. Relevance is not just related to the teaching material but also the pedagogy being adopted to deliver that content (Keller, 1987). Thus, we conceptualize relevance as, belief of the educator that GBP will provide some value added to students. Keller's model also states that different channels being adopted to deliver the teaching content can also moderate the attention and curiosity of the students. Thus, adopting GBP might impact the attention of the students, therefore from an educators-focused approach we conceptualize attention as educators' beliefs that GBP will help them to draw student's attention. Previous research found that gamified learning draws students' attention and was a strong predictor for their achievement (Su & Cheng, 2015). In the context of present study, we assume that educators' beliefs that GBP has a positive effect in attracting students' attention will affect their CI to use GBP in their respective courses.

Hence, we propose two additional hypotheses as follows:

H[5]: Relevance has impact on educator's CI for GBP.

H[6]: Attention has impact on educator's CI for GBP.

To date, a noteworthy body of literature has concentrated on observing SDT, TAM, JD–R and Keller's ARCS independently in education contexts, but no research has theoretically linked these models thus far. Briefly, based on the literature review, the present research examines relationships through self-efficacy, based on the SDT, technostress grounded on extended Job Demands–Resources Model, facilitating conditions built on UTAUT, flow experience from Flow theory, relevance and attention from Keller's ARCS model and educators' CI to use GBP based on TAM.

PROPOSED CONCEPTUAL FRAMEWORK

The conceptual framework for the present study is shown in Figure 1. From the theoretical perspective and from various research papers, it is established that use of GBP is an emerging concept which has been used by only a few educators. In this regard, an attempt is made to analyse the determinants perceived by the respondents for CI to use GBP by marketing educators post pandemic. Based on the review of literature and the discussion of the advantage as well the limitation of usage of pedagogy, six dimensions are conceptualized namely, *Relevance, Attention, Flow, Facilitating Condition, Techno-stress and Self-efficacy.*
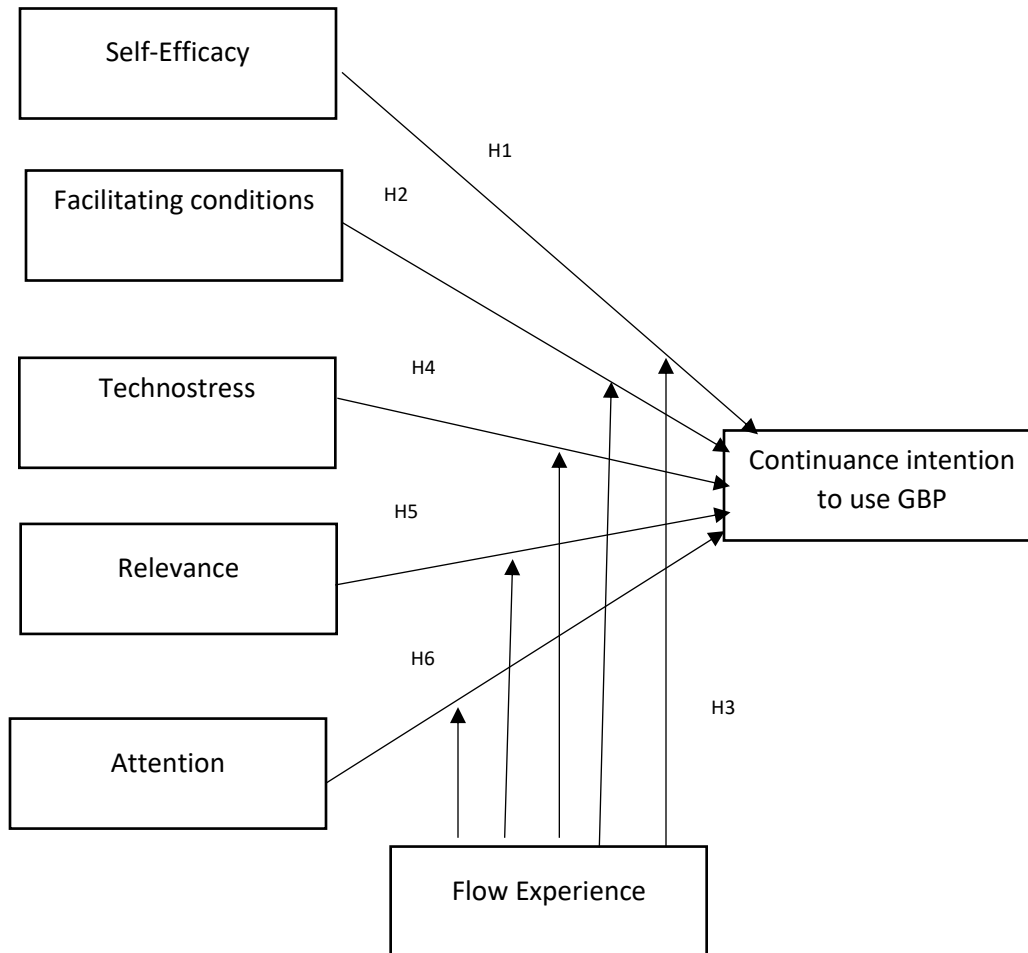

Figure 1: Proposed conceptual model

RESEARCH METHODOLOGY

Mixed-methods Research Design

In the Handbook of Mixed Methods Research (Tashakkori &Teddlie, 2003), multi method and mixed methods have been differentiated. According to the authors multi-method involves multiple types

of qualitative inquiry which includes case study and ethnography, or it may have multiple types of quantitative inquiry like surveys and experiments. However, mixed methods involve a combination of the two types of data, both qualitative and quantitative (Morse, 1991). It has become the most popular method for mixing qualitative and quantitative data in a single study (Johnson et al., 2007). The mixed-method research design can be exploratory or explanatory in nature. In some explanatory designs, quantitative data are collected and analysed first by the researchers, then a follow up qualitative study can be conducted. The objective of the qualitative study to seek a better understanding of the quantitative results. Hence our study has adopted this mixed–method explanatory research design.

Sample description and data collection

Through a structured online questionnaire 400 valid responses were collected via *Research Gate*, *academia.edu* and *LinkedIn*. The sample consisted of marketing educators employed in leading private universities of Tier 1 cities in India (Delhi, Mumbai, Bangalore, Chennai, Hyderabad, Kolkata, Ahmedabad, and Pune). The selection method was based on the following parameters: a) Marketing educator employed in private universities from tier 1 cities of India, and b) Educator must have taught at least one marketing subject with GBP. Sample size was calculated using Solvin's formula and comprised 42.9 % males and 57.1% females. Age-wise, 8.5 % were less than 25 years, 18.2 % were between 25 to 30 years, 48.1 % were between 35 to 45 years, 15.2 % were between 45 to 55 years while the remaining 10 % were more than 55 years of age.

Operational Measures

The present study adopted empirically tested measurement scales for all proposed dimensions. These are represented in Table 1 below.

Table 1: *Scales adopted for the study*

Dimensions	Theoretical Model	Sources
Relevance	Keller's ARCS model	Dempsey & Burke (1998)
Attention	Keller's ARCS model	Dempsey & Burke (1998)
Flow experience	Flow theory	Hong,Tai, Hwang & Kuo.(2016)
Facilitating Condition	UTAUT	Venkatesh, Morris, Davis & Davis (2003).
Techno-stress	Job Demands–Resources Model	Bakker & Demerouti (2007), Wang, Tan, & Li, (2020).
Self-efficacy	Self-Determination Theory	Ryan & Deci (2000), Panisoara, Lazar, Panisoara,Chirca & Ursu (2020)
Continuance Intention	TAM	Davis (1985), Panisoara, Lazar,Panisoara, Chirca & Ursu (2020), Wu & Chen (2017)

RESULTS OF THE ANALYSIS

Statistical Analysis: Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was used to summarize the data to better comprehend the patterns and association among existing variables. The Principal Component Analysis (PCA) data reduction technique was used in this extraction process. Subsequent Varimax rotation helped in grouping 34 identified items into seven factors. Sample adequacy was justified using the Kaiser-

Meyer-Olkin (KMO) test, and the KMO value was 0.844. The seven factors with 8, 6, 3, 6, 3, 5, 3 and 3 accounted for 19.74, 11.6, 10.79, 10.01, 8.61, 7.37, and 6.877 percent variance, respectively. EFA yielded a factor solution and explained 75.191% of the total variance. All the factor loadings for final study where above 0.5. The reliability alpha (Cronbach's alpha) for all variables was in the range of 0.700 to 0.937 which was above 0.7. Thus, the results were acceptable (Nunnally, 1978).

Testing of the hypotheses: Regression analysis

Regression analysis was used to investigate variation in the impact of the respective dependent and independent variables. Details of the regression analysis are shown in Table 3 below. Based on the p value (less than 0.05), hypotheses H[1], H[2], H[5]and H[6] were accepted and H[4] was rejected.

***Table 2:** Regression Analysis*

Constructs	p value	Hypothesis accepted/rejected
H1 Self efficacy	0.036	Accepted
H2 Facilitating conditions	0.000	Accepted
H4 Technostress	0.249	Rejected
H5 Relevance	0.000	Accepted
H6 Attention	0.000	Accepted

As hypothesised the model could not establish the relationship between Technostress, and it was removed from the proposed model. CFA and SEM were administered on the remaining five constructs: Self-efficacy, Facilitating conditions, Relevance, Attention, Flow experience and Continuance intention.

Confirmatory factor analysis (CFA)
Goodness of fit indices

The measurement model was established using CFA (Hair et.al. 2008). To test the goodness-of-fit (GFI) of the estimated measurement model, normed-fit index (NFI), χ^2 test value, comparative fit index (CFI), RMSEA, incremental-fit index (IFI), and TLI statistic were analysed (Hooper et.al. 2008). The measurement model of dependent and independent variables was analysed using CFA which showed a good model fit with χ^2/df = 1.526, CFI = 0.986, NFI = 0.960, TLI= 0.982, IFI= 0.986 and RMSEA = 0.036. The measurement model is shown in Figure 2.
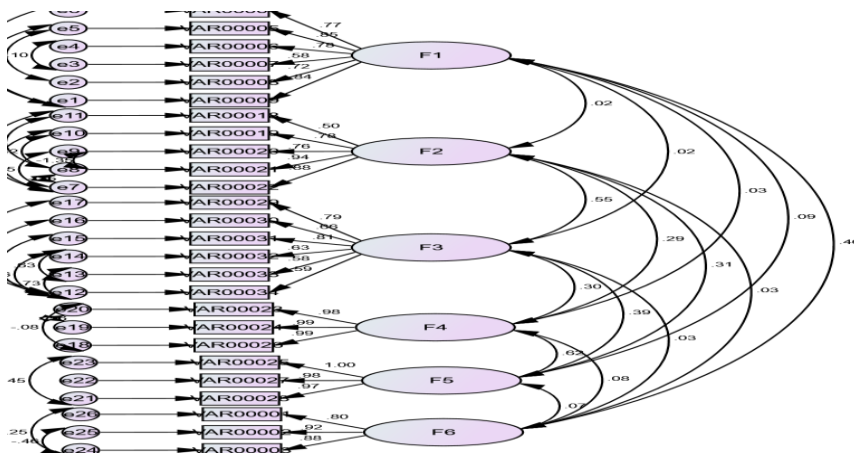

***Figure 2:** Measurement model*

Common method bias

Common method bias may happen as data were collected from individual respondents. This common method bias was analysed using Harman's single-factor test, and the outcomes of this study indicate that first factor structure accounts for 26.28%, which is < 50 % (Podsakoff et.al., 2003). Hence, data revealed that the outcomes of the study were not affected by the common method bias.

Reliability and validity tests

Composite reliabilities were in the range of 0.88–0.94 for all the constructs, which exceeded the recommended value of 0.6 (Bagozzi & Yi, 1988). The inter item reliability was examined using Cronbach alpha, and only items with inter item reliability of 0.70 were considered to have met the suggested range (between 0.78 and 0.99). To assess the construct validity, the discriminant and convergent validity methodology of Fornell & Larcker, 1981 was adopted (Hair et.al., 2008). Convergent validity was examined using average variance extracted (AVE) value. AVE values were found to be in the range of 0.68 to 0.92 (more than 0.5), which indicated that convergent validity of the constructs was well accepted. To establish the discriminant validity, AVE values of the constructs were related with the square of the correlation estimates. All constructs had AVE values greater than the squared inter construct correlation estimates (between 0.09 and 0.380), which supported discriminant validity of the constructs. To establish the face validity, experts from the field of marketing in both the academic and corporate sectors were approached to validate items of the study. The experts confirmed suitability of the items for the study.

Moderating effect of "Flow Experience"

Hierarchical multiple regression was adopted to assess effects of the moderating variable, experience. To test the moderation effect, we observed the interaction effect between independent variables, Self-efficacy (SE), Facilitating conditions (FC), Relevance, Attention and Experience (Moderator) and whether such an effect is significant in predicting CI for GBP. The variable Technostress was not included in the model as it did not have significant relationship with the dependent variable. Table 4 summarizes results of the Hierarchical multiple regression.

Table 4: Results of Hierarchical multiple regression

Moderator		**Customer Flow Experience**		
		F	sig	R^2 Change
Self-Efficacy	Model 1 without interaction term	2.252	0.107	0.011
	Model 2 With interaction term	4.338	0.005	0.021
Facilitating conditions	Model 1 without interaction term	24.999	0.000	0.112
	Model 2 With interaction term	16.968	0.000	0.002
Relevance	Model 1 without interaction term	123.621	0.000	0.383
	Model 2 With interaction term	84.724	0.000	0.007
Attention	Model 1 without interaction term	25.209	0.000	0.112
	Model 2 With interaction term	19.128	0.000	0.014

The analysis of Hierarchical multiple regression showed partial moderation with FC, Relevance and Attention. However, with SE it had full moderation effect. Since the quantitative data was not sufficient in capturing the subjective experiences of the users, qualitative data was used to seek more explanation with respect to flow experience. A qualitative approach was adopted to address the experience of marketing educators about adopting GBP during the pandemic, as it permits the researcher to depict the real-time experiences which educators had with GBP during the pandemic (Becker et al., 2012).

The Qualitative Approach

The current pandemic has provided opportunities for educators to give a face lift to online teaching by experimenting with new pedagogical tools, GBP is one of them. Recording and transcription of the face-to-face interview was carried out via google meet platform in English language, which permitted the researcher to fine-tune the questions during the data collection process. Semi-structured interviews included fundamental questions about participants' background and current GBP incorporated in marketing education during the pandemic and open-ended questions on experiences of GBP. Three subject matter experts checked the validity of the interview questions. An email invite was sent to respondents who filled an online questionnaire for the interview process, and 142 respondents expressed interest in participating in the interview. All the interested participants received consent form three days before the scheduled interview (Hill et al., 2005) which informed that the interview will be recorded for further analysis. An in-depth interview lasting for 30-45 minutes was conducted among 34 marketing educators between October 2020 to February 2021, post which saturation was observed in the data (Guest et al., 2006). The transcribed data was analysed by content analysis technique which was employed to produce valid and replicable interpretations (Krippendorff, 1989). Codes were established built on content analysis, and data was categorized.

Qualitative study analysis

As per the interviews conducted, Innov8 2.0, Simbound and Great Ideas for Teaching Marketing were commonly used by the marketing professors. Based on qualitative data collected, two major themes were identified; Positive experience associated with GBP and negative experience associated with the same. Positive experiences were further categorised under 4 sub themes and negative experiences were categorised under 3 sub themes.

Themes associated with positive experiences of GBP during the pandemic

With the help of content analysis 4 themes emerged from the voices of educators using GBP in marketing education.

Interesting experience: Marketing educators found that GBP is very enjoyable, and successful in gaining new knowledge by amalgamating technologies in marketing lessons and reworking them as pedagogical measures. The literature supports that in teaching new content or reviewing previous learning, GBP provides an interesting and engaging strategy for educators (Kali et al., 2015).

Interactive and engaging platform: Educators see GBP as an interactive and engaging platform to gain students' attention by supporting the importance of learning content to gaming activities and improving students' self-esteem and satisfaction. As noted by the educators, GBP is an engaging pedagogical method which has a special place in education technologies. The literature also supports the capability of GBP games to engage students, empowering them to smoothly expand boundaries of their abilities, talent, and expertise (Atkinson & Housley, 2003).

Experiential Learning: Educators while being interviewed agreed that GBP is focused on education, understanding and teaching while retaining the fun element, and enjoyment while making engagement active and immersive. GBP brings the experiential learning experience by incorporating immersive learning environment for students, a view supported in the literature (Becker, 2008).

Personal capacity: Many marketing educators noted during the interview, that as they are digitally advanced, they were able to use the GBP effectively and can guide students to use game-based tools effectively. Educators emphasised that since GBP was efficiently executed by them, students felt the active engagement, for which there is support in the literature (Chen et al., 2020).

Themes associated with negative experiences of GBP during the pandemic

Looking into some negative experiences encountered by marketing educators while implementing GBP into marketing lessons, reflected challenges mainly associated with online sessions, but no specific issue was highlighted with respect to GBP. Negative experiences were segmented into 3 broad themes:

Interactivity: It was highlighted by most of the educators that the interactivity level of students was a little challenging in online teaching. It was especially tricky to deliver concepts and engage students simultaneously during online classes Lack of self-directed learning was also highlighted by educators as a challenge for online sessions, but it was overcome to a great extent by GBP as students were actively involved during sessions.

Student Focus: Attendance and focus are other challenges associated, especially after a long period of strenuous online learning. Distractions from home-setting, noise, and accessibility of other electronic gadgets are sources of major distraction for general online sessions which was tackled to some extent by effective execution of GBP.

Assignment Evaluation: Educators mentioned that online evaluation was a herculean task and affected the feedback loop due to late or missing tasks. According to educators, below average students are the most affected by the same. Educators also showed concern about the integrity of assignments, thereby nullifying an unbiased measurement of growth of students learning outcomes noted in the literature (Johnson & Kim, 2021).

DISCUSSION AND CONCLUSION

Pedagogy has undergone an evolution in response to the pandemic. The current situation demands a digital era with new skill sets to meet the needs of a rapidly changing scenario. Across the globe many marketing educators are motivated and are acquiring new pedagogical measures to adapt to the change. The present study indicates that the marketing educators of higher education in India are interested in teaching with GBP and consider it an effective educational tool. Marketing educators understand and accept the necessity of engaging in problem solving along with critical and creative thinking via GBP. Keller's ARCS established in computer-based learning and gamification contexts (Su & Cheng, 2015), supports the view that GBP can prepare students to unravel complex problems – involving future problems – linked with aggressive, globally associated, and technologically demanding world events, which appropriately examines motivational subjects in gamification contexts (Astleitner & Wiesner, 2004). Findings of the study highlight that Relevance, Attention, Facilitating Condition, and Self-efficacy are the determinants of CI to use GBP, which to a considerable extent has helped the educators in meeting the student needs and provide students with appropriate choices and responsibilities. This impacts an individual's performance determined by his behavioural intention, dependent on attitude and

various subjective norms as emphasised by TRA. GBP has helped the marketing educators in developing greater attention from students and GBP also supports and enhances online teaching and learning during the pandemic and are clearly part of the future of the learning experience.

The study confirms that the relationship between all the independent variables with the dependent variable, is moderated by Flow experience. This finding of our study is in sync with the study by Dong et al., 2017 which explained the existence of cognitive and affect experience as moderating variables in the context of usage of Internet of Things, and with Liao et al., (2008) who verified the moderating effect of experience using the extended TAM model. FE supports GBP by inducing learning activities and supporting life-long learning which is priceless in education.

The study confirmed the JD-R model, that due to career and personal development opportunities and different training, mentoring and coaching is provided by the institution, which made educators quite well versed with GBP. As a result there is no statistical evidence of stress arising due to the high technical requirements necessary for GBP, and educators are not under any pressure due to the change in pedagogy to meet current technology-enhanced teaching requirements. Self-Determination Theory, Theory of Planned Behaviour and the Expectation–Confirmation model supports continuance use of GBP post pandemic very well. In essence, as perceived by educators at present, it is too early to state that GBP has helped the students to use game-based tools effectively, to communicate and interact remotely and to update students' knowledge which perhaps is the most critical aspect for academics.

However, it can be stated that GBP has the capability of gaining more attention, is more enjoyable and meets the needs and responsibilities of marketing educators. It depends on *self-efficacy of marketing educators* to exploit and explore GBP in marketing education which would require more involvement and incorporation of same so that the educators are able to enhance skills required for efficient and effective incorporation GBP within the curriculum. More emphasis is required to address the challenges faced by educators during online sessions and quickly adapt students' demand while using GBP. Experience of using GBP during the extraordinary crisis forced by COVID-19 was answered by the qualitative analysis from educators' perspective to get in depth understanding of educators. Our study reveals that successful efforts were implemented by marketing educators one of which is GBP, to make lessons effective during online classes. GBP gives the feeling of pleasure to educators in teaching marketing subjects. The Engagement model which explains how technology users, technology applications, technology environments should work together to yield a balance between enjoyment and efficiency supports it. Although educators faced multiple challenges, most of these challenges were extrinsic in nature which can be overcome by practice of the pedagogy.

MANAGERIAL IMPLICATION

Business education is undergoing exemplary changes and institutions are experiencing the impact of these changes. Education leaders are expected to swiftly design responses while the pandemic runs its course. Academic programs and educators face various difficulties related to online teaching. The education sector is one of the worst hit due to the shutdown of institutions forcing educators to adopt to new pedagogies to impart knowledge to students. Marketing educators are always ready for change due to the dynamic nature of the market requirements and continuance for new demands of the curriculum and making the students future ready. However, GBP is still at nascent stage and demands a wide-ranging approach to update educators' capability (Foster et al., 2015) to adapt GBP for more engaging sessions. This study therefore has important contributions as the results are relevant for recognising areas that needs improvement in implementing GBP and training for educators accordingly, as the ability of educators to integrate GBP is more integral to educators' professional expertise and skill range. This research can help

educators to overcome the challenges and effectively provide courses on use of GBP in teaching marketing courses.

LIMITATIONS AND FUTURE RESEARCH

The present research is focused on only marketing educators to maintain the homogenous data of experiences. Samples only form private universities of tier one cities of India were considered, however future researchers can do a comparative study between tier one and tier 2 cities or between different countries. Research can focus on capturing and analysing perceptions of the students on adaptation of GBP in terms of its usefulness to the students for a successful professional career.

REFERENCES

Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, vol. 47, no. 4, pp. 373-398.

Aldunate, R., & Nussbaum, M. (2013). Teacher adoption of technology. *Computers in Human Behavior*, vol. 29, no. 3, pp. 519-524.

Arnett, D.B., Wittmann, C.M. and Wilson III, B.J., (2004). Encouraging future helping behaviors: The role of student-faculty relationships in higher education marketing. *Journal of Marketing for Higher Education*, vol. 13, no. 1, pp.127-157.

Astleitner, H., & Wiesner, C. (2004). An integrated model of multimedia learning and motivation. *Journal of Educational multimedia and Hypermedia*, vol. 13, no. 1, pp. 3-21.

Atkinson, P. & Housley, W. (2003). Interactionism: An Essay in Sociological Amnesia. London: SAGE.

Bado, N. (2019). Game-based learning pedagogy: a review of the literature. Interactive Learning Environments, pp.1-13.

Bai, B., Wang, J., & Chai, C. S. (2019). Understanding Hong Kong primary school English teachers' **CI** to teach with ICT. *Computer Assisted Language Learning*, pp.1-23.

Bagozzi, R. & Yi, Y. (1988) On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Sciences*, vol.16, pp. 74-94.

Bakker, A. B., & Demerouti, E.2007. The job demands-resources model: State of the art. *Journal of managerial psychology*. ISSN: 0268-3946

Becker, K. (2008). Video Game Pedagogy: Good Games = Good Pedagogy. In C. Thomas Miller (Ed.), Games: Purpose and Potential in Education. New York: Springer.

Becker, S., Bryman, A., & Ferguson, H. (Eds.). (2012). Understanding research for social policy and social work 2E: themes, methods and approaches. policy press.

Bolton, R. N., Chapman, R. G., & Mills, A. J. (2019). Harnessing digital disruption with marketing simulations. *Journal of Marketing Education*, vol. 41, no. 1, pp. 15-31

Bottiani, J. H., Duran, C. A., Pas, E. T., & Bradshaw, C. P. (2019). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*, vol. 77, pp. 36-51.

Calafato, R., & Paran, A. (2019). Age as a factor in Russian EFL teacher attitudes towards literature in language education. Teaching and Teacher Education: *An International Journal of Research and Studies*, vol. 79, no. 1, pp. 28-37.

Caruana, A., La Rocca, A., & Snehota, I. (2016). Learner satisfaction in marketing simulation games: Antecedents and influencers. *Journal of Marketing Education*, vol. 38, no. 2, pp. 107-118.

Chang, E. H., Milkman, K.L., Gromet, D. M., Rebele, R. W., Massey, C., Duckworth, A.L., & Grant, A.M. (2019). The mixed effects of online diversity training, Natl Acad Sci U S A. vol. 116, no. 16, pp.7778-7783

Chang, M. M., & Lehman, J. D. (2002). Learning foreign language through an interactive multimedia program: An experimental study on the effects of the relevance component of the ARCS model. *CALICO journal*, pp. 81-98.

Chen, S., Zhang, S., Qi, G. Y., & Yang, J. (2020). Games Literacy for Teacher Education. *Educational Technology & Society,* vol. 23, no. 2, pp. 77-92.

Csikszentmihalyi, M. (1977). Beyond Boredom and Anxiety. 2nd Edition. Jossey-Bass, San Francisco.

Dai, H. M., Teo, T., & Rappa, N. A. (2020). Understanding **CI** among MOOC participants: The role of habit and MOOC performance. *Computers in Human Behavior*, vol. 112, 106455.

Davis, F. D. (1985). A technology acceptance model for empirically testing new end-user information systems: Theory and results (Doctoral dissertation, Massachusetts Institute of Technology).

Dempsey, J. V., & Burke Johnson, R. (1998). The development of an ARCS gaming scale. *Journal of Instructional Psychology*, vol. 25, pp. 215-221.

Dondi, C., & Moretti, M. (2007). A methodological proposal for learning games selection and quality assessment. *British Journal of Educational Technology*, vol. 38, no. 3, pp. 502-512.

Dong, X., Chang, Y., Wang, Y., & Yan, J. (2017). Understanding usage of Internet of Things (IOT) systems in China: Cognitive experience and affect experience as moderator. *Information Technology & People* vol. 30, no. 1, pp.117-138

Donna, L., & Novak, H. T. P.1 (1997). A new marketing paradigm for electronic commerce. *The information society*, vol. 13, no. 1, pp. 43-54.

Elliott, D. (2014). Levelling the playing field: engaging disadvantaged students through game-based pedagogy. Literacy Learning: The Middle Years, vol. 22, no. 2, pp. 34-40

Emin-Martinez, V. and Ney, M. (2013). Supporting teachers in the process of adoption of game based learning pedagogy. In ECGBL 2013-European conference on games based learning (pp. 156-162). ACPI.

Farber, M. (2015). Gamify your classroom. *British Journal of Educational Technology*, vol. 46, no. 6, pp. E29-E30

Florenthal, B. (2019). Students' motivation to participate via mobile technology in the classroom: A uses and gratifications approach. *Journal of Marketing Education*, vol. 41, no. 3, pp. 234-253.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, vol. 18, no. 1, pp. 39–50. https://doi.org/10.2307/3151312

Foster, A. N., Shah, M., & Duvall, M. (2015). Game network analysis: For teaching with games. In M. L. Niess, & H. Gillow-Wiles (Eds.), Handbook of research on teacher education in the digital age (pp. 380e411). Hershey: IGI Global

Govindarajan, V. & Srivastava A. (2020). What the shift to virtual learning could mean for the future of higher ed. Harvard Business Review, March 31, https://hbr.org/2020/03/what-the-shift-to-virtual-learning-could-mean-for-the-future-of-higher-ed, Accessed on December 29, 2020.

Guest, G., Bunce, A., & Johnson, L. (2006), "How many interviews are enough? An experiment with data saturation and variability", *Field Methods*, vol. 18, no. 1, pp. 59-82

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (2008) Multivariate Data Analysis, (7th ed.). Prentice Hall Publisher, Upper Saddle River, New Jersey

Hamari, J., Huotari, K., & Tolvanen, J. (2015). Gamification and economics. The gameful world: Approaches, issues, applications, 139.

Hill, C. E.; Knox, S., Thompson, B. J.; Williams, E. N; Hess, S. A.; & Ladany, N. (2005). "Consensual Qualitative Research: An Update". College of Education Faculty Research and Publications. vol.18.

Hollett, R. C., Gignac, G. E., Milligan, S., & Chang, P. (2020). Explaining lecture attendance behavior via structural equation modeling: Self-Determination Theory and the Theory of Planned Behavior. Learning and Individual Differences, 81, 101907.

Hong, J.-C., K.-H. Tai, M.-Y. Hwang and Y.-C. Kuo (2016). "Internet cognitive failure affects learning progress as mediated by cognitive anxiety and flow while playing a Chinese antonym synonym game with interacting verbal–analytical and motor-control," *Computers & Education*, vol.100, no.1, pp. 32-44.

Hooi, R., & Cho, H. (2017). Virtual world continuance intention. *Telematics and Informatics*, vol. 34, no. 8, pp. 1454-1464.

House, J. D. (2003). Instructional activities and interest in science learning for adolescent students in Japan and the United States: Findings from the Third International Mathematics and Science Study (TIMSS). *International Journal of Instructional Media*, vol. 30, no. 4, pp. 429-443.

Hsu, C. L., & Lu, H. P. (2004). Why do people play on-line games? An extended TAM with social influences and flow experience. *Information & management*, vol. 41, no. 7, pp. 853-868.

Hwang, G. J., Sung, H. Y., Hung, C. M., Yang, L. H., & Huang, I. (2013). A knowledge engineering approach to developing educational computer games for improving students' differentiating knowledge. *British journal of educational technology*, vol. 44, no. 2, pp. 183-196.

Johnson, L. L., & Kim, G. M. (2021). Experimenting with game-based learning in preservice teacher education. English Teaching: Practice & Critique.

Johnson, R. B., Onwuegbuzie, A.J. and Turner, L.A. (2007), "Toward a definition of mixed methods research", *Journal of Mixed Methods Research*, vol. 1, no. 2, pp. 112-33

Kali, Y., McKenney, S., & Sagy, O. (2015). Teachers as designers of technology enhanced learning. *Instructional Science*, vol. 43, pp. 173-179. doi:10.1007/s11251-014-9343-4

Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal of instructional development*, vol. 10, no. 3, pp. 2-10.

Kim, B. (2010). An empirical investigation of mobile data service continuance: Incorporating the theory of planned behavior into the expectation–confirmation model. Expert systems with applications, vol. 37, no. 10, pp. 7033-7039.

Kim, D., Lee, Y., Leite, W. L., & Huggins-Manley, A. C. (2020). Exploring student and teacher usage patterns associated with student attrition in an open educational resource-supported online learning platform. *Computers & Education*, 156, 103961.

Kiraz, E., & Ozdemir, D. (2006). The relationship between educational ideologies and technology acceptance in pre-service teachers. *Educational Technology & Society*, vol. 9, no. 2, pp. 152-165.

Krippendorff, K. (1989). Content analysis. In E. Barnouw, G. Gerbner, W. Schramm, T. L. Worth, & L. Gross (Eds.), International encyclopedia of communication (Vol. 1, pp. 403–407). Oxford University Press. Available online http://repository.upenn.edu/asc_papers/226.

Li, H., & Yu, J. (2020). Learners' continuance participation intention of collaborative group project in virtual learning environment: an extended TAM perspective. *Journal of Data, Information and Management*, vol. 2, no. 1, pp. 39-53.

Li, L., & Wang, X. (2020). Technostress inhibitors and creators and their impacts on university teachers' work performance in higher education. *Cognition, Technology & Work*, pp. 1-16.

Liao, S.H., Hong, J., Wen, M., Pan, Y., & Wu, Y. (2018). Applying Technology Acceptance Model (TAM) to explore Users' Behavioral Intention to Adopt a Performance Assessment System for E-book Production*, Eurasia Journal of Mathematics, Science and Technology Education* vol. 14, no. 10.

Liu, Y., Li, H., & Carlsson, C. (2010). Factors driving the adoption of m-learning: An empirical study. *Computers & Education*, vol. 55, no. 3, pp. 1211-1219.

Morse, J.M. (1991), "Approaches to qualitative-quantitative methodological triangulation", *Nursing Research*, vol. 40, no. 2, pp. 120-3.

Mumford, S., & Dikilitaş, K. (2020). Pre-service language teachers reflection development through online interaction in a hybrid learning course. *Computers & Education*, vol. 144, 103706.

Nielsen, K., & Cleal, B. (2010). Predicting flow at work: investigating the activities and job characteristics that predict flow states at work. *Occup Health Psychol*, vol. 15, no. 2, pp. 180-190

Nousiainen, T., Kangas, M., Rikala, J., & Vesisenaho, M. (2018). Teacher competencies in game-based pedagogy. *Teaching and Teacher Education*, vol. 74, pp. 85-97.

Novak, T.P., Hoffman, D.L. and Yung, Y.F., (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing science*, vol. 19, no. 1, pp.22-42.

Oduor, M., & Oinas-Kukkonen, H. (2021). Committing to change: a persuasive systems design analysis of user commitments for a behaviour change support system. *Behaviour & Information Technology*, vol. 40, no. 1, pp. 20-38.

Panisoara, I. O., Lazar, I., Panisoara, G., Chirca, R., & Ursu, A. S. (2020). Motivation and CI towards online instruction among teachers during the COVID-19 pandemic: The mediating effect of burnout and technostress. *International Journal of Environmental Research and Public Health*, vol. 17, no. 21, pp. 8002.

Robson, K. (2019). Motivating professional student behavior through a gamified personal branding assignment. *Journal of Marketing Education*, vol. 41, no. 2, pp. 154-164.

Roca, J. C., Chiu, C. M., & Martínez, F. J. (2006). Understanding e-learning continuance intention: An extension of the Technology Acceptance Model. *International Journal of human-computer studies*, vol. 64, no. 8, pp. 683-696.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, vol. 55, no. 1, pp. 68.

Saban, K., Lackman, C., Lanasa, J., & Burns, D. (2001) MBA Marketing Curriculum for the 21st Century, Journal of Marketing for Higher Education, vol. 10, no. 2, pp. 27-38, DOI: 10.1300/J050v10n02_03

San-Martín, S., Jiménez, N., Rodríguez-Torrico, P., & Piñeiro-Ibarra, I. (2020). The determinants of teachers' continuance commitment to e-learning in higher education. *Education and Information Technologies*, vol. 25, no. 4, pp. 3205-3225.

Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. *Bridging occupational, organizational and public health*, pp. 43-68.

Sharafi, P., Hedman, L., & Montgomery, H. (2006). Using information technology: engagement modes, flow experience, and personality orientations. *Computers in Human Behavior*, vol. 22, no. 5, pp. 899-916.

Su, C. H., & Cheng, C. H. (2015). A mobile gamification learning system for improving the learning motivation and achievements. *Journal of Computer Assisted Learning*, vol. 31, no. 3, pp. 268-286.

Šumak, B., Heričko, M., & Pušnik, M. (2011). A meta-analysis of e-learning technology acceptance: The role of user types and e-learning technology types. *Computers in human behavior*, vol. 27, no. 6, pp. 2067-2077.

Tashakkori, A. and Teddlie, C. (2003), Handbook of Mixed Methods in Social & Behavioral Research, Sage, Thousand Oaks, CA.

Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision sciences*, vol. 39, no. 2, pp. 273-315.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, pp. 425-478.

Waheed, M., & Jam, F. A. (2010). Teacher's intention to accept online education: Extended TAM model. *Interdisciplinary Journal of Contemporary Research in Business*, vol. 2, no. 5, pp. 330-344.

Wang, X., Tan, S. C., & Li, L. (2020). Technostress in university students' technology-enhanced learning: An investigation from multidimensional person-environment misfit. *Computers in Human Behavior*, 105, 106208.

Wu, B., & Chen, X. (2017). CI to use MOOCs: Integrating the technology acceptance model (TAM) and task technology fit (TTF) model. *Computers in Human Behavior*, vol. 67, pp. 221-232.

Zarafshani, K., Solaymani, A., D'Itri, M., Helms, M. M., & Sanjabi, S. (2020). Evaluating technology acceptance in agricultural education in Iran: A study of vocational agriculture teachers. *Social Sciences & Humanities Open*, vol. 2, no. 1, 100041.

Zhang, P., & Li, N. (2005). The importance of affective quality. *Communications of the ACM*, vol. 48, no. 9, pp. 105-108.

Zimmerman, J. (2020). Coronavirus and the great online-learning experiment: Let's determine what our students actually learn online. Chronicle of Higher Education, https://www.chronicle.com/article/Coronavirusthe-Great/248216, Accessed on February 29, 2021

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