

Hazzam, J., Wilkins, S., Singh, B., & Ibrahim, B. (2024). The drivers and outcomes of postgraduate students' adoption and use of LinkedIn learning. *Innovations in education and teaching international*, <https://doi.org/10.1080/14703297.2024.2346549>

The drivers and outcomes of postgraduate students' adoption and use of LinkedIn Learning

Joe Hazzam^a, Stephen Wilkins^b, Bharati Singh^a and Blend Ibrahim^c

^aStaffordshire Business School, Staffordshire University, Stoke-on-Trent, United Kingdom; ^bFaculty of Business and Law, The British University in Dubai, Dubai, United Arab Emirates; ^cFaculty of Business, Istanbul Ticaret University, Istanbul, Turkey

ABSTRACT

Social media educational tools represent an opportunity for higher education (HE) institutions to enhance postgraduate students' skills development. LinkedIn Learning can be used to complement classroom teaching and learning. However, the drivers and outcomes of this tool remain a gap in the literature. This study uses a cross-sectional research design and data from 232 postgraduate students at a university in the United Kingdom (UK). The results of structural equation modelling indicate that facilitating conditions and habit are the main drivers of students' behavioural intention to use LinkedIn Learning, and the actual use of this tool contributes to students' skills development and satisfaction. The results indicate that age moderates the relationships between effort expectancy, social influence, habit and behavioural intention of using LinkedIn Learning. The findings contribute to the effective integration of LinkedIn Learning as an additional tool that may complement teaching and learning, improving postgraduate students' skills development and satisfaction.

KEYWORDS

Social media; LinkedIn Learning; postgraduate; UTAUT2; skills development; student satisfaction

Introduction

During the last two decades, social media technologies have been used in higher education (HE) to complement classroom teaching and learning even though they have not emerged specifically as educational tools (Manca, 2020). These platforms can be used to enhance interaction and communication outside the formal classroom sessions, including the delivery of teaching materials and knowledge transfer (Chugh & Ruhi, 2017; Lacka & Wong, 2021; Manca & Ranieri, 2016). Social media platforms have been deployed in HE for a variety of instructional approaches such as collaborative learning, social learning, problem-based and work-based learning among others (Akçayır & Akçayır, 2016). New platforms (e.g. Portfolium) use the power of social media networks to support students' transition from HE to their future careers. Previous studies have explained that the use of these platforms as a pedagogical tool may influence student engagement, collaborative learning, satisfaction and grades in several HE settings (Al-Rahmi et al., 2018; Chugh et al., 2020; Hosen et al., 2021). Social media educational studies have highlighted the benefits of several platforms in HE teaching and

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learning including the high frequent use of Facebook, YouTube and X (formerly Twitter) social networks (Al-Qaysi et al., 2020; Chugh & Ruhi, 2017). However, platforms that provide new features and facilitate student interactions in formal and professional environments such as LinkedIn are yet to be explored in HE settings (Manca, 2020; Rueda et al., 2017).

The LinkedIn social network differs from other platforms such as Facebook and X by linking students to professional networks and future career opportunities (Rueda et al., 2017). LinkedIn fosters business connections between students and industry professionals, providing them a platform to highlight their professional profiles including education, skills, competencies and experience. A recent literature review by Ruparel et al. (2020) suggested that professional social media networks such as LinkedIn may support students to initiate and progress their careers. According to Slone and Gaffney (2016), LinkedIn provides students the opportunity to enhance their employability and build a professional online presence. In the classroom environment, LinkedIn has been used by educators to improve students' engagement and collaboration including the reinforcement of basic concepts (Cooper & Naatus, 2014). The use of LinkedIn as an educational tool complements the teaching and learning process and highlights an opportunity for students' development of a professional profile (López-Carril et al., 2022). In addition to the platform professional networking features, LinkedIn Learning may support teaching and learning by providing more than 16,000 online courses and video tutorials that have been delivered by industry experts (LinkedIn, 2023; MacKenzie, 2023). LinkedIn Learning existed as Lynda.com from 1995 prior to acquisition by LinkedIn in 2015, which was then bought by Microsoft in 2016. LinkedIn Learning represents an opportunity for educators in HE to integrate these courses into students' direct independent learning (Cooper & Naatus 2014). However, the factors that facilitate students' adoption and use of these courses including the outcomes of their usage remain a gap in the literature (Healy et al., 2023).

Direct independent learning is a key feature and one of the cornerstones of UK higher education supporting students to 1) take responsibility for their own learning; 2) choose and set their own objectives and 3) decide what, when and how to learn among other characteristics (Hockings et al., 2017). However, previous studies have highlighted several challenges that inhibit students achieving valuable outcomes from their direct independent learning, such as self-motivation and self-organisation (McKendry & Boyd, 2012). LinkedIn Learning courses may be a suitable option for postgraduate students' direct independent learning, supporting their development as autonomous learners and their employability skills (Cooper & Naatus 2014; López-Carril et al., 2022; MacKenzie, 2023). These courses follow the characteristics of direct independent learning, providing students with flexibility on what, when and how they learn (Hockings et al., 2017), and upon completion they provide certification, motivating students to highlight and share their achievements with their network and potential employers. Thus, the objectives of this research are to understand the factors that facilitate students' adoption and use of LinkedIn Learning courses and to investigate the contributions of this usage to students' skills development and satisfaction. The findings of this study contribute to the successful integration of social media tools, and specifically LinkedIn Learning, in teaching and learning processes that enhance students' direct independent learning, skills development and satisfaction.

Theory and hypotheses

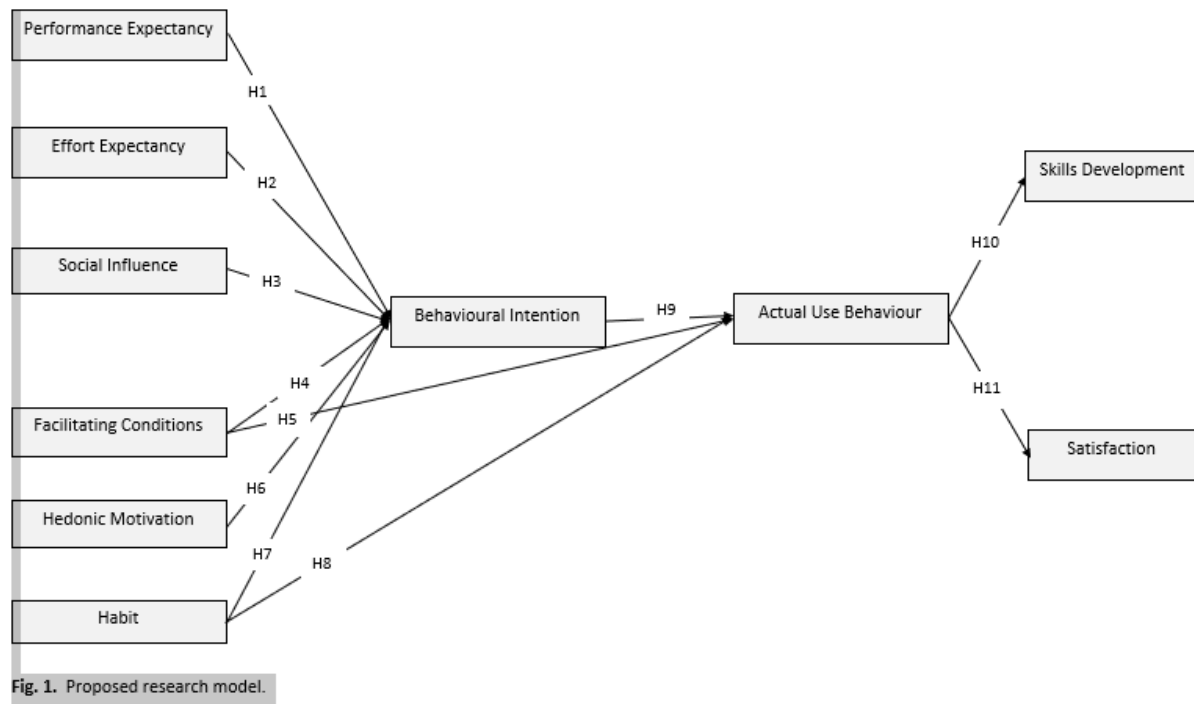
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The Technology Acceptance Model developed by Davis (1989) explains that perceived usefulness and perceived ease of use of new technology are the main drivers of intention to use and actual usage of this technology. The application of this model in HE settings has shown that students' perceived usefulness and ease of use have influenced their behavioural intention and use of digital and e-learning (Salloum et al., 2019; Scheel et al., 2022), such as mobile learning (Al-Emran et al., 2018) and social media educational tools (Al-Rahmi et al., 2018).

Venkatesh et al. (2003) extended the Technology Acceptance Model by adding two variables: social influence and facilitating conditions. The Unified Theory of Acceptance and Use of Technology (UTAUT) has explained significant variances in the adoption of mobile learning (Venkataraman & Ramasamy, 2018) and social learning technologies (Khechine et al., 2020). Three new variables, namely hedonic motivation, price value and habit, were introduced to the UTAUT model by Venkatesh, Thong and Xu (2012) contributing to the behavioural intention to use a technology, which in turn explains the actual use of this new technology. Recent studies in HE have shown that the UTAUT2 model explains significant variances in behavioural intention and use behaviour of mobile learning applications (Ameri et al., 2020; Nikolopoulou et al., 2020).

In this study, the UTAUT2 model is applied to understand the factors that influence students' adoption and use of LinkedIn Learning excluding the price value since the university provides free access to the students. Besides, one of the main objectives of this study is to investigate the outcomes of LinkedIn Learning courses on students' skills development and satisfaction, which represent critical components of the postgraduate taught experience survey in UK universities (AdvanceHE, 2023; Poon, 2019). The moderation effects of age, gender, experience and frequency of use depend on the research context and may differ from teenagers to adults or between gender which may not apply to our study participants (Ameri et al., 2020; Nikolopoulou et al., 2020). Thus, these relationships were not hypothesized in our model and their effects were analysed in a post-hoc analysis. Figure 1 presents our research model and the hypothesized relationships.

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Performance expectancy and behavioural intention

In this study, performance expectancy explains a student's perception of how LinkedIn learning is useful to their studies, to enhance their productivity, including the accomplishment of various important learning activities. Previous studies in HE settings have confirmed the importance of this concept as a predictor of intention to use mobile learning, social media educational technologies and digital learning (Al-Rahmi et al. 2018; Nikolopoulou et al., 2020; Salloum et al., 2019; Scheel et al., 2022). Thus, we propose the following hypothesis:

H1: Performance expectancy is positively related to students' behavioural intention of using LinkedIn Learning

Effort expectancy and behavioural intention

The effort expectancy in this study refers to a student's expectation of the level of physical and mental effort that will be performed with LinkedIn Learning usage. Previous studies in educational settings have supported the link between the effort expectancy of using new technology and the behavioural intention of usage (Al-Rahmi et al., 2018; Nikolopoulou et al., 2020; Scheel et al., 2022). Therefore, we propose the following hypothesis, with effort expectancy measuring clarity and easiness:

H2: Effort expectancy is positively related to students' behavioural intention of using LinkedIn Learning

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Social influence and behavioural intention

In this study, social influence underlines the degree to which students perceive that others such as their instructors or peers believe that they should or should not use LinkedIn Learning in their studies. According to Al-Emran et al. (2020), social influence predicts positively and significantly the intention to use mobile learning by students. Nikolopoulou et al. (2020) have confirmed this result and explain that social influence relates positively to students' intention to use mobile technology in education (Wang et al., 2009). Thus, the following hypothesis is formulated:

H3: Social influence is positively related to students' behavioural intention of using LinkedIn Learning

Facilitating conditions, behavioural intention and actual use behaviour

This study explains facilitating conditions as the student's perception that the lecturer's technical competence and university infrastructure are sufficient to support the effective use of LinkedIn Learning tools. This concept has been considered a powerful predictor of intention to use and the actual usage of new technology (Venkatesh et al., 2012). Recent studies in HE have confirmed the positive influences of people and university facilitating conditions on students' intention to use and actual usage of social media and mobile learning (Khechine et al., 2020; Nikolopoulou et al., 2020). Therefore, we propose the following hypotheses:

H4: Facilitating conditions is positively related to students' behavioural intention of using LinkedIn Learning

H5: Facilitating conditions is positively related to students' actual use behaviour of LinkedIn Learning

Hedonic motivation and behavioural intention

This study defines hedonic motivation as the student's perception of fun and enjoyment derived from using LinkedIn Learning in their studies. Hedonic motivation has been considered a critical factor facilitating students' adoption of e-learning (Salloum et al., 2019) and mobile learning (Nikolopoulou et al., 2020; Wang et al., 2009). These findings are confirmed by the study of Khechine et al. (2020), which found a significant relationship between students' motivation and their intention to use social learning applications. Thus, we propose:

H6: Hedonic motivation is positively related to students' behavioural intention of using LinkedIn Learning

Habit, behavioural intention and actual use behaviour

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In this study, we refer to habit as the student's automatic use of LinkedIn Learning as a result of learning from previous experiences and an addiction to using the platform. The habit of using educational technologies such as mobile learning or social media tools is considered a strong predictor of behavioural intention and use of the new technology (Nikolopoulou et al., 2020; Venkatesh et al., 2012). The positive and significant relationships between habit, behavioural intention and actual use have been confirmed by Khechine et al. (2020) using new educational application with pharmacy students. Therefore, we propose:

H7: Habit is positively related to students' behavioural intention of using LinkedIn Learning

H8: Habit is positively related to students' actual use behaviour of LinkedIn Learning

Behavioural intention and actual use behaviour

This research defines behavioural intention as the extent to which students intend and continue to use LinkedIn Learning in their studies. Previous studies have confirmed that behavioural intention is a strong determinant of students' use of mobile learning (Nikolopoulou et al., 2020; Al-Emran et al., 2020), e-learning (Salloum et al., 2019), educational mobile applications (Ameri et al., 2020), and social media educational tools (Al-Qaysi et al., 2020). Thus, we propose:

H9: Behavioural intention is positively related to students' actual use behaviour of LinkedIn Learning

Actual use behaviour and skills development

Skills development is an important outcome metric of course evaluation at the postgraduate level and measures student confidence in developing several types of skills (Poon, 2019). The use of LinkedIn social networks has the potential to improve students' skillset such as independent learning, employability, communication and networking skills among others (Healy et al., 2023; Hockings et al., 2017; López-Carril et al., 2022). Besides, LinkedIn Learning provides students the opportunity to update their status with a new certificate of completion, which may lead them to feeling better prepared for their future careers (Cooper & Naatus 2014, Ruparel et al., 2020). The use of LinkedIn Learning facilitates students' access to industry experts and reinforces the development of skills into the course learning activities. (MacKenzie, 2023). Thus, we propose:

H10: Actual use behaviour of LinkedIn Learning is positively related to students' skills development

Actual use behaviour and satisfaction

LinkedIn educational tools can enhance students' engagement and improve their teaching and learning experience (Cooper & Naatus, 2014). LinkedIn Learning may provide the students with educational experiences that satisfy their needs and enhance their confidence

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with direct independent learning (MacKenzie, 2023). Besides, LinkedIn Learning offers students a learning experience that emphasises future-oriented thinking, enhancing their perceived value and quality of the course (Healy, 2023; Peterson & Dover, 2014). Therefore, we propose the following hypothesis:

H11: Actual use behaviour of LinkedIn Learning is positively related to students' satisfaction

Research methodology

Context

To address the study objectives, LinkedIn Learning was introduced at the beginning of the second semester to 360 postgraduate students enrolled in two modules at a university in the UK, which are core subjects for the MSc Digital Marketing Management, Master of Business Administration (MBA) and MSc International Business Management programmes. During the first week of the semester, two module leaders explained the accessibility, self-enrolment and functionality of LinkedIn learning including three examples of LinkedIn Learning courses that fit the learning objectives of the two modules. This was followed by several reminders during the second, third and fourth week of the semester, motivating the students to complement the teaching and learning sessions with LinkedIn Learning courses. Finally, a survey questionnaire was posted on the virtual learning management system during the last two weeks of the semester to collect the data and understand students' perceptions toward the drivers and outcomes of LinkedIn Learning adoption and usage.

Measures

The survey's items and scales that measure performance expectancy (4 items), effort expectancy (4 items), social influence (3 items), facilitating conditions (4 items), hedonic motivation (3 items), habit (4 items), behavioural intention (3 items) and actual use behaviour (4 items) were adapted from the previous pre-validated instrument developed by Nikolopoulou et al. (2020). The three items that measure satisfaction with the module were adapted from Rueda et al. (2017). The skills development six items were adapted from postgraduate taught survey experience (AdvanceHE, 2023). All the items were measured using a five-point Likert scale ranging from 'Definitely disagree' coded as 1 to 'Definitely agree' coded as 5. Finally, the survey questionnaire has included demographic questions such as gender, age, experience with LinkedIn and number of LinkedIn Learning courses completed during the semester.

Data analysis and results

Sample

The total sample population was 360 postgraduate students. 232 students completed the questionnaire voluntarily by the end of week 10 of the semester, resulting in a response rate

of 64.4%. There were 119 male (51.3%) and 112 female (48.3%) respondents, and one prefers not to say. 124 (53.4%) of the respondents were aged less than 25 years old, and 108 (46.6%) were aged 25 years old or more. 152 (65.5%) of the respondents were enrolled on the MSc International Business Management, 43 (18.5%) on the MBA and 37 (15.9%) on the MSc Digital Marketing Management. The majority of the respondents are international students (95.7%), use social media between 1 and 3 hours per day (57.3%), and have 1 to 2 years of experience with the LinkedIn social network (65.1%).

Measurement model results

First, we conducted confirmatory factor analysis (CFA) to examine how well the measured variables represent the research constructs (Anderson & Gerbing, 1988; Gallagher et al., 2008). The measurement model was estimated (see Table 1) using maximum likelihood estimation and covariance matrix in AMOS software version 26. The results indicate that the data has a good fit, and the model fit indices are acceptable: $\chi^2 = 1041.86$ (df = 584, $p < 0.01$); $\chi^2/df = 1.78$; RMSEA = .05; CFI = .93, and the values of the standardised factor loading estimates are higher than 0.7, with statistical significance of $p < 0.001$ (see Table 1). Further, composite reliability (CR) values are above the threshold of $> .70$ and the average variance extracted (AVE) values are above the minimum cut criteria of $> .50$, explaining that the constructs achieve convergent validity (Anderson & Gerbing, 1988) (see Table 1).

Table 1

Results of the confirmatory factor analysis, with the corresponding factor loadings and reliabilities.

Construct	Item	Loading	T value	α	CR	AVE
Performance expectancy	PE1	0.862	-	0.90	0.907	0.710
	PE2	0.877	17.576			
	PE3	0.884	17.814			
	PE4	0.740	13.317			
Effort expectancy	EE1	0.738	-	0.88	0.886	0.661
	EE2	0.820	12.485			
	EE3	0.868	13.244			
	EE4	0.822	12.522			
Social influence	SI1	0.826	-	0.86	0.867	0.685
	SI2	0.845	14.828			
	SI3	0.811	14.027			
Facilitating conditions	FC2	0.795	-	0.84	0.814	0.594
	FC3	0.777	12.297			
	FC4	0.740	11.619			
Hedonic motivation	HM1	0.644	-	0.84	0.858	0.674
	HM2	0.907	11.212			
	HM3	0.885	11.062			
Habit	HT1	0.914	-	0.90	0.904	0.703
	HT2	0.830	17.762			
	HT3	0.779	15.691			
	HT4	0.825	17.557			

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Behavioural intention	BI1	0.854	-	0.90	0.903	0.757
	BI2	0.890	17.612			
	BI3	0.867	16.886			
Use behaviour	USE1	0.796	-	0.88	0.887	0.663
	USE2	0.805	13.394			
	USE3	0.833	13.979			
	USE4	0.823	13.770			
Skills development	SK1	0.710	-	0.88	0.888	0.569
	SK2	0.828	11.790			
	SK3	0.706	10.116			
	SK4	0.746	10.679			
	SK5	0.794	11.336			
	SK6	0.737	10.550			
Satisfaction	SS1	0.872	-	0.89	0.896	0.742
	SS2	0.818	15.482			
	SS3	0.893	17.678			

Second, discriminant validity is achieved if the value of the square root of AVE of each construct is higher than its highest correlation with any other construct in the model. Table 2 shows that the square root of AVE of the study constructs, in the diagonal, is greater than their correlations below the diagonal line (Fornell & Larcker, 1981). Thus, the research constructs achieved discriminant validity.

Table 2. Convergent and discriminant validity.

	PE	EE	SI	FC	HM	HT	BI	USE	SK	SS
Performance expectancy	<i>0.84</i>									
Effort expectancy	0.76	<i>0.81</i>								
Social influence	0.55	0.77	<i>0.82</i>							
Facilitating conditions	0.66	0.77	0.74	<i>0.77</i>						
Hedonic motivation	0.55	0.61	0.60	0.74	<i>0.82</i>					
Habit	0.50	0.60	0.75	0.63	0.79	<i>0.83</i>				
Behavioural intention	0.72	0.70	0.72	0.72	0.73	0.72	<i>0.87</i>			
Use behaviour	0.52	0.56	0.69	0.61	0.65	0.82	0.73	<i>0.81</i>		
Skills development	0.49	0.46	0.25	0.39	0.31	0.17	0.19	0.09	<i>0.75</i>	
Satisfaction	0.52	0.50	0.35	0.43	0.40	0.31	0.27	0.18	0.74	<i>0.86</i>

Notes: figures in italics on the diagonal are the square roots of the average variance extracted.

Hypothesis tests

Following the analysis of the measurement model, we used the structural equation modelling technique to test the research hypotheses. The model fit indices of the structural model explain acceptable data fit: $\chi^2 = 1109.68$ (df = 599, $p < 0.01$); $\chi^2/\text{df} = 1.85$; RMSEA = .06; CFI = .92, and the model explains 73.3% of the variance in behavioural intention and 73% in the actual use behaviour of LinkedIn Learning. Table 3 provides the results of the hypothesis tests, including the standardised coefficients and the significance of the path analysis.

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Table 3. Hypothesis test results.

	Relationship between constructs	Path weight	Result
H1	Performance expectancy to behavioural intention	0.03 [^]	Not supported
H2	Effort expectancy to behavioural intention	0.06 [^]	Not supported
H3	Social influence to behavioural intention	0.08 [^]	Not supported
H4	Facilitating conditions to behavioural intention	0.43**	Supported
H5	Facilitating conditions to actual use behaviour	0.05 [^]	Not supported
H6	Hedonic motivation to behavioural intention	0.10 [^]	Not Supported
H7	Habit to behavioural intention	0.25**	Supported
H8	Habit to actual use behaviour	0.55**	Supported
H9	Behavioural intention to actual use behaviour	0.32**	Supported
H10	Actual use behaviour to skills development	0.15**	Supported
H11	Actual use behaviour to satisfaction	0.25**	Supported

**Denotes significance at 0.05 level; [^] not significant.

As shown in Table 3, the relationships between performance expectancy ($\beta = 0.03$, $p = 0.644$), effort expectancy ($\beta = 0.06$, $p = 0.632$) and social influence ($\beta = 0.08$, $p = 0.527$) and behavioural intention are not significant. Thus, H1, H2 and H3 are not supported. The relationships between facilitating conditions ($\beta = 0.43$, $p = 0.001$) and behavioural intention is significant supporting H4. However, the relationship between facilitating conditions ($\beta = 0.05$, $p = 0.601$) and actual use behaviour is not significant, and H5 is not supported. The relationship between hedonic motivation ($\beta = 0.10$, $p = 0.420$) and behavioural intention is not significant concluding that H6 is not supported. The relationship between habit ($\beta = 0.25$, $p < 0.044$) and behavioural intention is significant, and the relationships between Habit ($\beta = 0.55$, $p < 0.001$) and actual use behaviour, and behavioural intention ($\beta = 0.32$, $p = 0.004$) and actual use behaviour are significant supporting H7, H8 and H9. Finally, the relationships between actual use behaviour ($\beta = 0.15$, $p = 0.037$) and skills development and actual use behaviour ($\beta = 0.25$, $p < 0.001$) and satisfaction are significant supporting H10 and H11.

Post-hoc analysis

We proceed with multi-group moderation analysis using SPSS AMOS software which allows the comparison of the model's relationships across gender, age groups and experience (Wang et al., 2009). To perform multi-group moderation, two conditions must be considered: first, we tested for general moderating effects using Chi-square difference test by restricting all the paths in one model, while in the other they were unconstrained (Walsh et al., 2008). Second, a Chi-square difference test will be performed when constraining and un-constraining the specific path under study. The Chi-square difference tests explain that gender ($\Delta\chi^2 = 48.605$ (df = 38), $p = 0.116$), experience ($\Delta\chi^2 = 46.490$ (df = 38), $p = 0.162$) are not general moderators of the model. However, age ($\Delta\chi^2 = 63.555$ (df = 38), $p = 0.006$) is a general moderator of the model. Thus, we proceed with path analysis between the two younger and older age groups.

The Chi-square difference tests for the relationships between performance expectancy ($\Delta\chi^2 = 1.351$ (df = 1), $p = 0.245$), facilitating condition ($\Delta\chi^2 = 0.013$ (df = 1), $p = 0.909$), hedonic motivation ($\Delta\chi^2 = 1.614$ (df = 1), $p = 0.204$) are not significant. Thus, there are no differences

between age groups for these relationships. On the other hand, the Chi-square difference test for the relationship between effort expectancy ($\Delta\chi^2 = 3.166$ (df = 1), $p = 0.075$) and behaviour intention is significant, and this relationship is positive and significant for the older group ($\beta = 0.391$, $p = 0.080$) and not significant for the younger group ($\beta = -0.183$, $p = 0.447$). The Chi-square difference test for the relationship between social influence ($\Delta\chi^2 = 8.535$ (df = 1), $p = 0.003$) and behaviour intention is significant, and this relationship is not significant for the older group ($\beta = -0.433$, $p = 0.194$) and positive and significant for the younger group ($\beta = 0.484$, $p = 0.007$). Finally, The Chi-square difference test for the relationship between habit ($\Delta\chi^2 = 5.857$ (df = 1), $p = 0.016$) and behaviour intention is significant, and this relationship is positive and significant for the older group ($\beta = 0.621$, $p = 0.010$) and not significant for the younger group ($\beta = -0.075$, $p = 0.672$). Table 4 highlights the significant Chi-square difference tests, and the path analysis differences between younger and older age groups.

Table 4. Results of multi-group analysis

	Younger age	Older age	$\Delta\chi^2$ (df=1)
Effort expectancy → Behavioural intention	-0.183	0.391	3.166*
Social influence → behavioural intention	0.484	-0.433	8.535***
Habit → Behavioural intention	-0.075	0.621	5.857**
$\Delta\chi^2$ (df=38): 63.555***			

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Discussion

The results of the study explain that facilitating conditions and habit are the main predictors of LinkedIn Learning behavioural intention, which in turn impacts the actual use of this learning tool. However, the influences of these factors differ between younger and older student groups. Further, this study extends the UTAUT2 model and explains that the actual use of LinkedIn Learning contributes to students' skills development and satisfaction supporting an effective integration of social media tools and specifically LinkedIn Learning into teaching and learning activities.

The relationship between performance expectancy and behavioural intention was not significant, indicating that students do not perceive that LinkedIn Learning can improve their productivity or support their learning activities. This finding may be explained by students' perceptions that knowledge acquisition in the classroom and in the presence of a lecturer is more beneficial than LinkedIn Learning activities (Khechine et al., 2020).

The results indicate that the relationship between effort expectancy and the behavioural intention of using LinkedIn Learning differ significantly between younger and older students. While effort expectancy is a critical predictor in older students (Wang et al., 2009), the younger students may have higher social media self-efficacy and feel more comfortable to use this platform, explaining the non-significant relationship in this age group (Khechine et al., 2020; Wang et al., 2009). Alternatively, social influence predicts LinkedIn Learning behavioural intention significantly in the younger age group and not in the older age group. Younger people may be influenced more by their friends' or instructor's opinions toward

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LinkedIn Learning while older people decide for themselves. The use of LinkedIn courses was not mandatory in this study which may explain why the older age group did not pay attention to the opinion of others (Khechine et al., 2020).

The hypothesis test results found that facilitating conditions influence behavioural intention of using LinkedIn Learning, and this relationship was not moderated by age groups. This finding explains the importance of lecturer instructional directions and the university's technology infrastructure in facilitating students' intention to use the platform and it contrasts the outcome of Khechine et al. (2020) study showing that the availability of these conditions contribute to making students more willing to use a social learning system. However, these conditions were not enough to predict the actual use of LinkedIn Learning, contradicting the previous studies of Ameri et al. (2020) and Nikolopoulou et al. (2020) that found a positive and significant relationship between facilitating conditions and the use of mobile educational applications.

Hedonic motivation did not contribute to students' behavioural intention of using LinkedIn Learning. LinkedIn Learning courses involve several hours watching recorded videos which may influence students' perception of the fun and pleasure using the platform. HE institutions may assess the quality of these courses and how they link to the learning outcomes, enhancing students' motivation to use LinkedIn Learning. Besides, these certificates are for completion and not for skills' acquisition which may have affected their motivation. Students are not perceiving LinkedIn Learning to be enjoyable and pleasurable, contradicting previous studies that confirm the positive influence of hedonic motivation on students' intention to use mobile or social learning applications (Khechine et al., 2020; Nikolopoulou et al., 2020).

The results of the study explain the critical role of habit in predicting behavioural intention and the actual use of LinkedIn Learning. This finding corroborates previous research and highlights that students' automatic use of the platform and the learning from previous experiences contribute to their intention and use of the technology (Ameri et al., 2020; Nikolopoulou et al., 2020). However, this impact differs significantly between age groups; the habit in the older age group influences significantly their intention to use LinkedIn Learning, and this relationship was not significant in the younger age group. The automatic association with LinkedIn Learning is stronger in the older age group. This may be the result of positive learning experiences, impacting positively their intentions to use the platform (Venkatesh et al., 2012).

Unsurprisingly, our results explain that behavioural intention of using LinkedIn Learning contributes significantly to the actual use of the platform. This result is well established in previous research that employed the technology acceptance theories, including UTAUT and UTAUT2, to examine the relationship between behavioural intention and the acceptance and use of new educational technologies (Ameri et al., 2020; Nikolopoulou et al., 2020; Wang et al., 2009).

Finally, this study provides empirical evidence that the actual use of LinkedIn Learning contributes to student skills development and satisfaction. LinkedIn Learning courses give students access to industry experts, which may enhance their knowledge and skills beyond the classroom teaching and learning (Healy et al., 2023; MacKenzie, 2023). This supports previous studies that recommend the use of the LinkedIn platform to enhance student employability skills and career prospects (Cooper & Naatus 2014, Ruparel et al., 2020).

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Besides, students that have used LinkedIn Learning are more satisfied with the module teaching and learning activities, confirming the benefit of social media educational tools in the process of students' engagement and satisfaction (Al-Rahmi et al., 2018).

Implications and limitations

Theoretical implications

This study has several theoretical implications that broaden our understanding on the integration of social media educational tools such as LinkedIn Learning in teaching and learning processes. First, the findings reveal that facilitating conditions and habit are the main predictors of postgraduate students' behavioural intention to use LinkedIn Learning. On the other hand, performance and effort expectancy, and hedonic motivation were not contributing to the behavioural intention of LinkedIn Learning usage. Thus, the UTAUT2 framework should be applied with caution when considering the adoption and use of social media technology in education.

Second, students' characteristics such as age have influenced the contributions of effort expectancy, social influence and habit on the intention of postgraduate students to use LinkedIn Learning. Third, this study contributes to the social media educational literature by investigating the outcomes of LinkedIn Learning usage. This extends the UTAUT2 model and provides empirical evidence that the use of LinkedIn Learning may improve two critical key performance indicators of postgraduate taught experience survey such as skills development and satisfaction.

Practical implications

This study presents several implications supporting educators to integrate LinkedIn Learning successfully in teaching and learning activities. First, HE institutions should integrate this platform with the learning management system, providing educators and students the accessibility and compatibility with several devices.

Second, educators may provide training on the functionality and use of LinkedIn Learning at the beginning of the semester, which may facilitate students' intention to use the platform. This training may reduce the barriers of adoption and improve students' confidence and motivation to use LinkedIn Learning. Third, HE institutions may introduce LinkedIn Learning to the students during their first year at the university. This enhances the automatic use of the platform, and the learning from previous experiences enables stronger intention and use of LinkedIn Learning at later stages of their studies.

Fourth, for a successful integration of LinkedIn Learning, educators need to consider students' age group, lifestyle and previous experience with social media networks. For example, mature students may need more training and supplementary sessions on how to use the platform, enhancing their understanding of the effort required when utilising LinkedIn learning. On the other hand, instructors can ask students to share their positive experiences with LinkedIn Learning, which may influence the younger age groups to use the platform.

Finally, postgraduate instructors may incorporate LinkedIn Learning into their curriculum and module design to facilitate direct independent learning. LinkedIn Learning courses

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introduce students to the industry settings and networking opportunities which may enhance their perception of skills development and their satisfaction with the teaching and learning activities.

Limitations and avenues for future research

The study presents several limitations and opportunities for future research. First, the cross-sectional nature of the data in this research may not provide a full understanding of how students' perceptions may change over time and how skills and satisfaction may be affected before and after the use of LinkedIn Learning. Thus, future studies may employ a longitudinal or experimental design to advance our knowledge on the benefits of this platform and how students' perceptions develop or change with time. Second, the study was conducted with postgraduate students studying specific courses in a specific country. Future studies may examine LinkedIn Learning among different student populations and courses. Third, future researchers may use a qualitative research design to understand why performance expectancy and other variables are not major predictors of students' behavioural intention to use LinkedIn Learning. Finally, the reminders and the voluntary use of LinkedIn Learning in our study may have impacted upon students' intentions and actual use of the technology. Future, research may include the certification of LinkedIn Learning as mandatory and part of an assessment. This may provide new insights on the effective integration of this learning tool in education settings.

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