

**MOBILE-ASSISTED LEGAL LANGUAGE LEARNING READINESS,  
BELIEFS, AND ASPIRATIONS AMONG LAW STUDENTS AT  
GOVERNMENT COLLEGE UNIVERSITY FAISALABAD, PAKISTAN**

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**ABSTRACT**

*This quantitative study explores the readiness, beliefs and aspirational wants of the LLB students (N = 193) of College of Law, Government College University Faisalabad (GCUF), Pakistan. The context of English for Specific Purposes (ESP) and Hutchinson and Waters (1987) three-part needs analysis model was utilized. The MALL has three analytically separate dimensions that are captured by a 6-item 5-point Likert scale instrument: device readiness and navigational comfort, learning beliefs, and aspirational professional wishes focused on courtroom advocacy and problem analysis. Analyses consist of descriptive statistics, Pearson bivariate correlations, one way analysis of variance, independent-samples t-tests, chi-square contingency tests and multiple OLS regression. Results reveal a uniformly high MALL composite mean (M = 3.649, SD = 0.822), with item means of 3.601–3.689 and Agree+ frequencies of 64.2%–68.9%. All 15 pairwise inter-item correlations are significant (r = .429–.665, p < .001). However, ANOVA shows that there is no statistically significant difference between the readiness of students in each proficiency group in MALL (F(2, 190) = 0.90, p = .408), whereas there is statistically significant difference in oral lacks (p = .022) and legal reasoning deficits (p = .018). There was no gender difference revealed (p = .147). The results of the Chi-square are that there is no relation between proficiency and MALL use ( $\chi^2(2) = 1.21, p = .546$ ). Multiple OLS regression indicates that the strongest predictor of MALL readiness ( $R^2 = .341, \beta = .483, p < .001$ ) is Section C (perceived curriculum gap). The results found that institution-specific evidence that integration of MALL at the College of Law, GCUF would be appreciated by all its students irrespective of their proficiency or gender and that the integration of MALL at this institution should be based on culturally contextualised and task-based MALL module, which would be grounded in the discourse of Pakistani legal and courtroom discourse.*

**Keywords:** *MALL, mobile-assisted language learning, legal English, ESP needs analysis, law students, Pakistan, aspirational wants, blended learning, self-directed learning, Technology Acceptance Model*

## 1. INTRODUCTION

Over the last decade, mobile-assisted language learning (MALL) as a broad concept referring to the application of mobile and handheld devices in the L2 learning environment and outside the classroom has become one of the most significant developments in the language learning field and in English for Specific Purposes (ESP) teaching (Bozdoğan, 2015; Berge & Muilenburg, 2013; Yang & Gao, 2022). New smart phones and educational applications have rapidly been developed and adopted, especially in the wake of the COVID-19 pandemic where students are learning remotely, that now provide an unprecedented infrastructure for flexible, personalised, and contextualised language learning, which does not rely on access to physical classrooms ( Yang & Gao, 2022; Iftikhar, 2025). In professional contexts, in which learners need to develop register, genre knowledge and communicative competence for complex target situations, MALL can be used to enrich learning beyond limited contact hours and to provide just-in-time vocabulary and skills learning that is in line with the needs of the learners in their professional goals (Hoven & Palalas, 2011; Pegrum, 2019; Musurmanov et al., 2025).

This is particularly true in Pakistan for law students at the undergraduate level. Despite the fact that the legal profession is conducted in English language only (superior court proceedings, statutory instruments, judicial judgment and professional correspondence), the lack of communication in English language among law graduates is consistently mentioned by professional supervisors (Jamshad et al., 2021), by self-evaluation of law graduates (Ahmad, 2011) and by comparative analysis of legal education in Pakistan (Baig, 2025; Reayat et al., 2020). Although MALL has the potential to support the law students' learning environment in Pakistan, there is a scarcity of empirical studies of the use of MALL among Pakistani law students. In the only study conducted in Pakistan context specifically on MALL, Rashid (2018) investigated the attitudes, beliefs and practices of the tertiary students in Pakistan after the application of MALL training, and the results showed that using mobile devices could solve the problems of outdated teaching methods, rote learning and limited motivation. This study has not been followed up on by a study specifically for the legal ESP context.

The present study's sample results (81.3%) of mobile app uptake, confirmed by using a chi-square analysis, puts in place that the technological preconditions for MALL uptake are already in place at GCUF's College of Law, which is independent of English proficiency and gender. The need is not to convince students to use mobile technology, but to give them contextually relevant legal information and pedagogical supports, in the mobile infrastructure that they already use. Figueiredo (2023) reiterates that MALL has positive effects for language learners in a variety of language learning contexts, and Iftikhar (2025) proves the positive impact of MALL on learner motivation, engagement and access in L2 learning. However, to ensure equitable implementation, Arnedo (2025) warns, device access, connectivity, teacher training and cultural-linguistic contextualisation are key constraints that are directly pertinent to the publicly-funded institutional context of GCUF.

Mobile-Assisted Language Learning (MALL) has been introduced as a promising pedagogical approach in ESP-based legal education in Pakistan in view of the fact that there are still some deficits between the traditional legal English teaching and the communicative needs of

legal professionals. The recent study conducted at Government College University Faisalabad (GCUF) revealed that MALL readiness and learner demand were the most dominant dimensions of students' perceived Legal English needs, in addition to other students' oral communication and legal reasoning skills deficiencies (Fatima et al., 2026). On this basis, the present study investigates law students' preparedness, perception and future expectations about MALL and its potential to overcome the structural deficit of traditional legal English teaching for the improvement of legal English. The study puts technology adoption in the larger context of ESP learners' needs, professional communication and thus adds to the on-going discussion on context-sensitive, learner-centred and digitally mediated ESP methodology in legal education in Pakistan.

Yet, none of the studies has ever performed a detailed multi-dimensional needs analysis for law students of a particular Pakistani public law institution involving the readiness of the device, law students' learning beliefs and professional aspirational wants. While Khan et al. (2024) has developed national-level MALL readiness baselines for 385 law undergraduates from multiple institutions, analyses at the institution level, by proficiency level, and regression-augmented analyses required for curriculum decisions at the campus level have not taken place. This study fills this lacuna at the College of Law, GCUF for the first time and is the first legal ESP profile in Faisalabad.

### 1.1 Research Questions

1. What is the MALL readiness, belief, and aspirational wants profile of LLB students at GCUF at item and composite level?
2. Does MALL readiness differ significantly across English proficiency groups, and how does this compare to the proficiency differentiation observed for oral lacks and legal reasoning deficits?
3. What predicts MALL readiness oral lacks, legal reasoning deficits, or perceived curriculum inadequacy and how strong is the motivational association?

## 2. LITERATURE REVIEW

### 2.1 MALL: Theoretical Foundations and Empirical Evidence

The theoretical basis of mobile-assisted language learning extends from constructivism in education which holds that learners construct their own knowledge with initiative and interact with the surrounding environment and from ecological theories that locate language learning in authentic settings, rather than out of context classrooms (Arnedo, 2025; Hoven & Palalas, 2011). Berge and Muilenburg (2013) laid the foundation for their strong argument that mobile devices are particularly well equipped to combine language learning with other aspects of learners' everyday lives due to their ubiquity, portability, and ability to perform in a just-in-time manner. Pegrum (2019) expanded this into a broad theory, seeing mobile devices as 'lenses' through which learners experience authentic, context-embedded language experiences, and showed that MALL can provide personal, collaborative, and sustainable learning experiences that go beyond the constraints of classroom or fixed instructional time.

There has been a significant expansion of empirical evidence on MALL's effectiveness over the last ten years. In his systematic review and meta-analysis of 17 quantitative and qualitative MALL studies (2023), Figueiredo found that the language learning outcomes of mobile-assisted methods were positive in various learner groups, depending on the learners' motivation, demographic characteristics, and sociocultural context. In a book-length review, Yang and Gao (2022) trace the exponential growth of MALL research since 2020 and illustrate the unique ways MALL can provide personalised, sustainable and equitable learning at scale. In a mixed-methods

study, Iftikhar (2025) compared the MALL-based instruction with traditional instruction to demonstrate that the MALL-based instruction can improve the motivation, engagement, and accessibility of the language learners by giving them more opportunities to engage in self-directed learning via the interactive mobile applications. According to Tang and Kukulska-Hulme (2025), more than 80% of ELT practitioners view mobile learning as ‘learning at any time and any place’, which can in turn influence the vocabulary and listening practice — skills of importance in L2 language acquisition.

In the professional ESP context in particular, Musurmanov et al. (2025) showed that students learning in MALL context had significantly better cognitive, motivational, operational and communicative competence than those learning in traditional instruction context in an experimental study of 405 Uzbek students majoring in economics. The effect of MALL instruction went beyond mere linguistic improvement and included better readiness for professional communication as well. The cross-disciplinary evidence directly informs the use of MALL in legal ESP at GCUF, where the demands of genre-specificity and register-complexity of the target situation English-medium courtrooms, legal writing, client communication are similar to those of professional communication of economics. Hoven and Palalas (2011) developed the design principles of MALL in ESP contexts at a Canadian community college, and their results showed measurable gains in out-of-classroom mobile ESP instruction which targeted speaking and listening deficiency, and were directly applicable to the oral advocacy and legal reasoning needs reported in the present study.

## 2.2 MALL Readiness as a Multidimensional Construct

The construct of MALL readiness in empirical literature has multiple analytically distinct dimensions and these need to be separated when designing instruments and the analytical process. In a survey of 581 Indian higher education students, Habib et al. (2022) reported five factors which preceded MALL adoption: individual desire and motives, perceived ease of use, technological factors, social influence and perceived usefulness and found that readiness and motivation acted as mediators between the factors of MALL adoption and the perceived learning outcomes. This five factor model is similar to Arnedo (2025) and Estrella (2025) who describe the Technology Acceptance Model (TAM) as the most prevalent attitudinal model in the study of how learners interact with and embrace mobile learning technologies. The regression results of the present study are directly compared to those of Estrella (2025) who conducted a TAM study on 126 Ecuadorian students at a polytechnic institution and found that Perceived Usefulness, Social Influence, and Perceived Outcomes were the strongest predictors of MALL acceptance.

In addition to technology acceptance, readiness has a dimension that is self-directed, and this has been well reported by Nguyen and Nguyen (2024). They examined the readiness for self-directed learning (SDL) among 467 students of the Vietnamese English programme, and found that the readiness for SDL was significantly and positively related with both MALL motivation and MALL employment frequency (Pearson  $r$  significant,  $t$ -test confirming high SDL readiness), thus demonstrating that MALL-ready students are also those who are most willing to regulate their own learning process, which is directly relevant to the out-of-classroom learning willingness captured by item D3 in the present instrument. The study by Huseinović (2023) revealed that digital competency and the learning style preferences such students had were significantly correlated with the preference of technology-assisted learning over traditional instruction, with the highest preferences for MALL modalities being video, voice recordings and practical language

use with proficient speakers preferences that align with the aspirations of GCUF's law students in the courtroom advocacy and case analysis.

Bozdoğan (2015) conducted a meta-analysis of 32 studies on MALL and found that the most common skill domains targeted were vocabulary and listening, and that learner perspectives, intention, acceptance and readiness were key research foci, which align with the present study instrument design. Zhu (2021) has shown that motivation is the most complicated and problematic factor in the process of the adoption of MALL, and that there are unique motivational-emotional features of mobile environments that are not reflected in the classical study of motivation in the classroom. The argument made in the present study was inspired by Rahim (2014) who suggested a conceptual framework of ESAP mobile learning based on eight mobile learning and e-learning frameworks, and identified the methodological precedent of this study, which was regression approach, by suggesting that the proposed framework could be verified using Structural Equation Modelling with PLS.

### **2.3 Demographics, Gender, and MALL Readiness**

There is emerging research on whether there are systematic differences in MALL readiness across demographic groups, with implications for ensuring equitable implementation and targeted curriculum design. The results of the quantitative TAM-based study by Essafi et al. (2025) that involved 164 university students from Morocco showed that gender was not a significant factor affecting students' acceptance of MALL whereas age and university level emerged as significant factors, with age revealing a non-significant trend in the expected direction, and university level revealing a non-significant trend in the opposite direction, a pattern similar to the present study (age:  $t = 1.419$  and  $p = .157$ ; university level:  $t = 1.464$  and  $p = .144$ ). This trans-cultural convergence between two culturally very different Muslim majority environments increases the generalizability of the gender neutral MALL readiness finding.

The most relevant Pakistani context has been explored by Rashid (2018) who studied the impact of MALL training on attitudes, beliefs and practices of Pakistani tertiary students and found that the structural issues in the Pakistani higher education system, such as outdated teaching approach, rote learning, crowded classrooms, and lack of enthusiasm among teachers, are the very conditions in which mobile devices can have the most profound pedagogical impact. The high-readiness profile of learners found in the present investigation (composite  $M = 3.649$ ; 81.3% existing app users) is in complete synchrony with Rashid's (2018) finding that learners in Pakistan perceive the mobile devices as a supportive aid for flexible, low-cost, convenient and interactive learning.

In their specific context, law students and technology, Ismail and Hashim (2020) evaluated the readiness of law students at the Faculty of Law, UKM Malaysia, towards Virtual Reality-based Education (VRBE), and found that students were ready to learn through VR technologies; in a similar manner to the present study, where law students were found to be ready towards MALL, the study's outcome confirms that the law student population was receptive towards technology-supportive pedagogical approaches, especially when presented as relevant to the profession.

### **2.4 MALL in Legal ESP and Pakistani Legal Education**

In the legal ESP context in particular, Khan et al. (2024) laid the groundwork for the Pakistani MALL evidence base as a sample of 385 LLB undergraduate students from various public and private universities; mobile learning readiness  $M = 3.68-3.85$ ; more than 75%

comfortable with digital instruction; four-factor structure (legal English, mobile readiness, critical thinking, cultural relevance) accounted for over 60% of variance; Cronbach  $\alpha = .93$ . That study explicitly recommended a culturally relevant MAELT module, and found that current English courses were not adequate to meet the needs of the legal profession ( $M = 3.54-3.75$ ). This is built on by the present study, which is the first institution specific, proficiency-stratified, regression-augmented MALL profile at GCUF's College of Law.

Overall, the professional ESP context of the international evidence suggests that MALL could be applied in legal English teaching. Shevchenko and Bykonina (2026) illustrate the development of the following competences in legal ESP: interactive technologies, which are not only language skills but also critical thinking, competences of professional communication, and competences of argumentation skills that are required for courtroom advocacy — the aspirational wants that are reflected in D4 and D5 of the present instrument. The implementation of Flipped Classroom (FC) in legal education in Pakistan was proposed by Ali (2024) given that the students' most desired pre-class activity was MALL which would then allow the class time to be dedicated to face-to-face moot court practice and legal case analysis (D4:  $M = 3.684$ ). Kizjibek (2025) demonstrated measurable improvements in language and professional reasoning abilities when using project-based learning with authentic legal tasks; a task-based architecture that is fully compatible with MALL delivery.

In the future, Fan and Zhang (2024) have a positive outlook as they carried out analyses with structural equation modeling on 417 Chinese students in an artificial intelligence-assisted EFL learning environment, finding that AI literacy, along with learner attitudes and foreign language enjoyment, significantly predicted the continuance intention for technology-assisted language learning, with AI literacy indirectly affecting the continuance intention through attitude mediation. The MALL readiness profile recorded in the present study is not only a starting point for teaching legal English in Pakistan but also a prerequisite for the digital competence of the Pakistani legal profession. As legal practice in Pakistan is increasingly moving in the direction of legal AI, the capability of preparing legal documents and utilizing documents of case law are being increasingly leveraged by these tools, as also reported by Afzal et al. (n.d.).

### **2.5 Curriculum Gap as Predictor of MALL Motivation: The Structural Argument**

Theoretically, an interesting issue that purely descriptive MALL readiness studies don't provide an answer to is what motivates MALL. This is directly addressed by the multiple regression analysis in the present study in which the perceived curriculum gap (operationalised in Section C of the instrument) is the hypothesized dominant predictor. This prediction is based on the theoretical structure of Hutchinson and Waters (1987): if the learner sees a significant difference between what is provided and what the situation calls for in terms of his/her profession (the 'necessities' construct), he or she is motivated to find an alternative learning pathway, and in the present context, MALL is the most accessible and self-directed learning pathway available for the Pakistani law students.

Rachmawati (2024) supports this argument by basing it on the ESP law education literature where she believes that needs analysis has to be strictly connected with the professional outcomes targets to create only true motivation, not a superficial one. However, Baig (2025) is right that advocacy, writing and argumentation skills are among the professional skills that are systematically lacking in legal education in Pakistan and which students are aiming to acquire through MALL. The authors of the two studies cited above, Reayat et al., 2020, and Siddiqui et

al., 2023, report that current English language curricula suffer from a lack of "alignment" with professional communication in English. Naveed (2016) states that it is important that the instruction in Legal English be rooted in the local legal situation in Pakistan to bring about real relevance. These conditions combine to form exactly what the regression model substantiates: a lack of perceived curriculum is a predictor of adopting technology for learning, whereas a lack of some particular skill is not.

### 3. METHODOLOGY

#### 3.1 Research Design

The design for this study is quantitative, cross sectional survey and it is conducted in the tradition of ESP needs analysis with sub analysis of readiness for MALL. The 19 items of the instrument measure the oral lacks (Section A), legal reasoning deficits (Section B), and curriculum gap perceptions (Section C) in addition to the primary unit of analysis (the six items of Section D: MALL). Cross domain regression and correlation analyses are possible.

#### 3.2 Participants and Setting

The participants were 193 LLB students from the College of Law, GCUF Faisalabad surveyed in December, 2025. The complete demographic profile is in Table 1. The male-dominant sample (80.3%) is representative of the law colleges that are public funded and are located in Punjab. The mode for the self-rated English proficiency was Intermediate (66.3%). Importantly, participants indicated that 81.3% of them currently used mobile apps in their education, which means that a substantial population was engaged in the educational use of mobile apps.

**Table 1**

*Participant Demographic Profile (N = 193)*

Variable	Category	n	%
<b>Gender</b>	Male	155	80.3
	Female	36	18.7
	Prefer not to say	2	1.0
<b>English Proficiency</b>	Intermediate	128	66.3
	Beginner	33	17.1
	Advanced	32	16.6
<b>Mobile App Use (Education)</b>	Yes	157	81.3
	No	36	18.7

*Note.* Int. = Intermediate.

#### 3.3 Instrument

This 19 item questionnaire, which used a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) was completed online through Google Forms. The MALL section (Section D; D1 - D6) records: (1) navigational comfort and device readiness (D1); (2) learning belief and motivation (D2 - D3); and (3) aspirational professional wants (D4 - D6). The validated dimensions of Khan et al. (2024) were used to inform the items which were adapted to the context of the GCUF. The mean inter-item correlation ( $\bar{r}$ ) for the 6 items on the MALL was .565. The instrument

was general in that it captured perceived curriculum gaps (Section C, 3 items), legal reasoning deficits (Section B, 5 items) and oral lacks (Section A, 5 items).

### 3.4 Data Analysis

Descriptive statistics (M, SD, Agree+ frequencies) for all 6 items of the MALL and the mean for the composite scores. Pearson bivariate correlations for each student between all of the six MALL items. One-way ANOVA (Tukey HSD post hoc) for differences between proficiency groups. Independent-samples t test for Gender comparison: Chi-square independence test for relationship between MALL use and proficiency. Multiple OLS regression analysis with the MALL composite as dependent variable and Sections A, B and C as predictor variables. All analyses used SPSS (v. 23);  $\alpha = .05$ .

## 4. RESULTS

### 4.1 MALL Item-Level Profile

Means and SDs for each item, frequencies of responses ‘Agree+’ and classifications of dimensions are presented in Table 2. The composite is shown on the lollipops in figure 1 as the means.

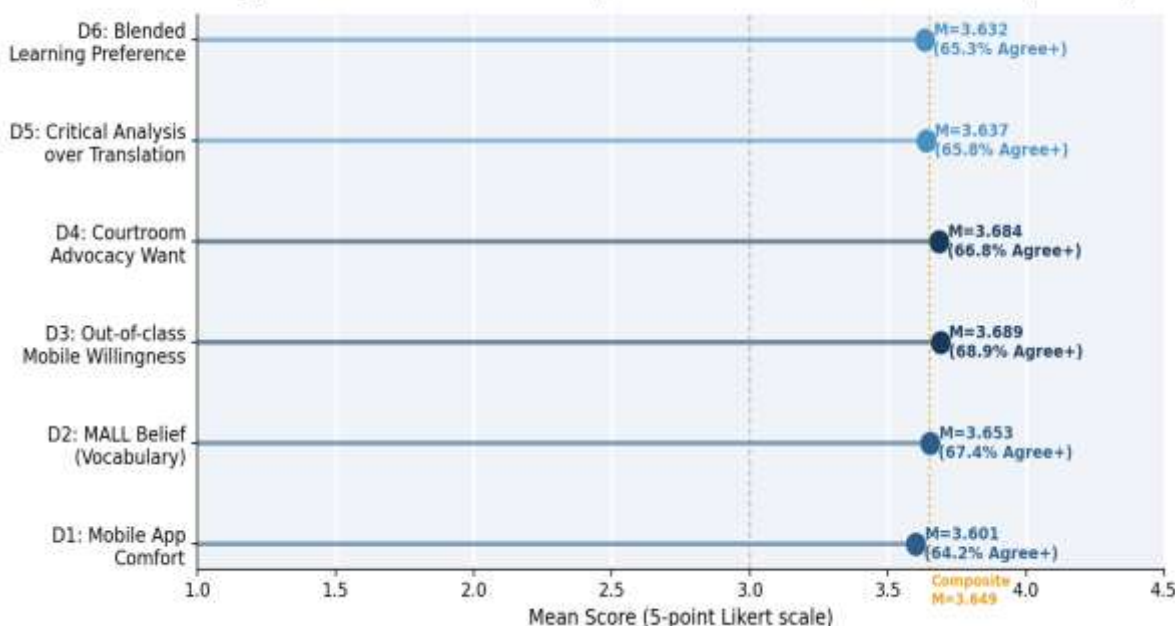
**Table 2**

**MALL Item-Level Descriptive Statistics and Dimension Classifications (N = 193)**

Item	M	SD	Agree+ %	MALL Dimension
D1. I am comfortable navigating mobile apps to complete quizzes and learning assignments	<b>3.601</b>	1.042	64.2%	<i>MALL Readiness</i>
D2. I believe using a mobile app would make learning legal vocabulary easier and more convenient	<b>3.653</b>	0.973	67.4%	<i>MALL Belief</i>
D3. I am willing to use my mobile device for learning outside of classroom hours	<b>3.689</b>	0.972	68.9%	<i>Learning Autonomy</i>
D4. I hope to improve my confidence in public speaking and courtroom advocacy	<b>3.684</b>	1.079	66.8%	<i>Advocacy Aspiration</i>
D5. I want to learn how to analyse cases critically rather than just translate them	<b>3.637</b>	1.082	65.8%	<i>Critical Reasoning Want</i>
D6. I prefer a course that mixes traditional teaching with digital/mobile learning activities	<b>3.632</b>	1.013	65.3%	<i>Blended Learning Preference</i>

**Note.** M and SD on a 5-point scale. Agree+ % = % selecting Agree or Strongly Agree. Composite M = 3.649, SD = 0.822.

**Figure 1. MALL Readiness and Aspirational Wants – Item-Level Means (N = 193)**

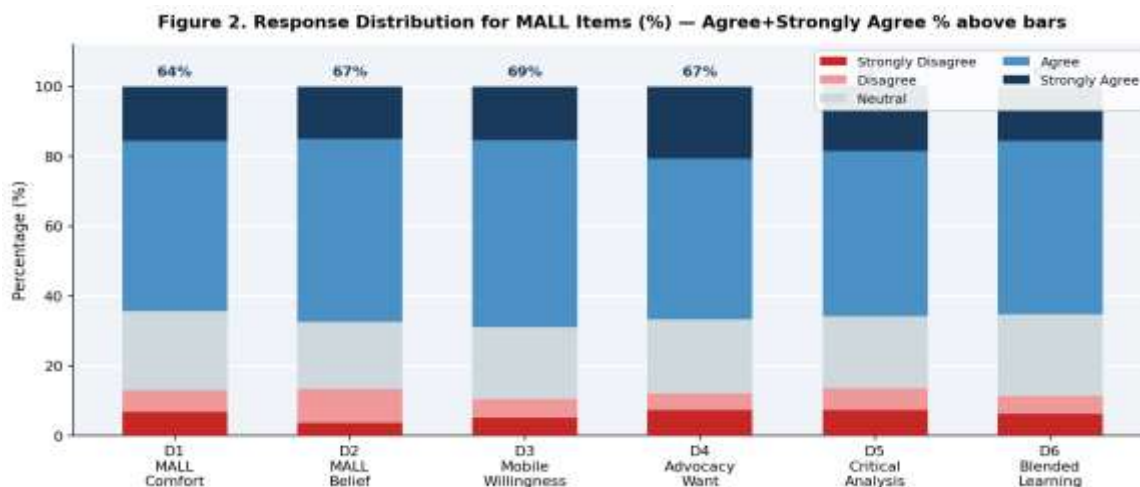


*Figure 1. MALL item-level means (N = 193). Dotted line = composite M = 3.649. Values show Agree+Strongly Agree %.*

Item means clustered between 3.601 (D1) and 3.689 (D3), a range of 0.088. The frequencies of the responses were between 64.2% and 68.9% for agreement. Items (D4–D6) are aspirational wanted items, and are numerically indistinguishable from readiness and belief items, thus supporting the point that MALL-ready students are also equally professionally aspirational motivated.

#### 4.2 MALL Response Distribution

Figure 2 presents the stacked response distribution for all six MALL items.



*Figure 2. Stacked response distribution (%) for MALL items D1–D6. Figures above bars = Agree + Strongly Agree combined %.*

Across all items, Agree was consistently modal (46.1%–53.4%); Strongly Agree added 15.0%–20.7%, producing Agree+ totals of 64.2%–68.9%. The percentages for the Strongly Disagree and Disagree combined never exceeded 16.5% on any item.

#### 4.3 MALL Inter-Item Correlations

The Pearson bivariate correlation matrix is shown in Table 3. All correlations between pairs of variables were significant at the .001 level and the range was .429 to .665.

**Table 3**

*Pearson Bivariate Correlations Among MALL Items (N = 193)*

	D1	D2	D3	D4	D5	D6
<b>D1: MALL Comfort</b>	—					
<b>D2: MALL Belief</b>	<b>.664**</b>	—				
<b>D3: Learning Autonomy</b>	.474**	<b>.656**</b>	—			
<b>D4: Advocacy Want</b>	.429**	.540**	<b>.656**</b>	—		
<b>D5: Critical Reasoning</b>	.449**	.548**	.546**	<b>.646**</b>	—	
<b>D6: Blended Learning</b>	.453**	.562**	.608**	<b>.665**</b>	<b>.662**</b>	—

*Note.* \*\* $p < .001$  (two-tailed). Coefficients  $\geq .60$  bolded.

The internal correlation structure (three of which are above  $r = .65$ ) suggests that readiness, beliefs and aspirational wants constitute a single motivational unit. Students who are prepared for MALL are also those who would like to achieve the career goals that MALL would help them achieve.

#### 4.4 ANOVA: Proficiency-Group Differences

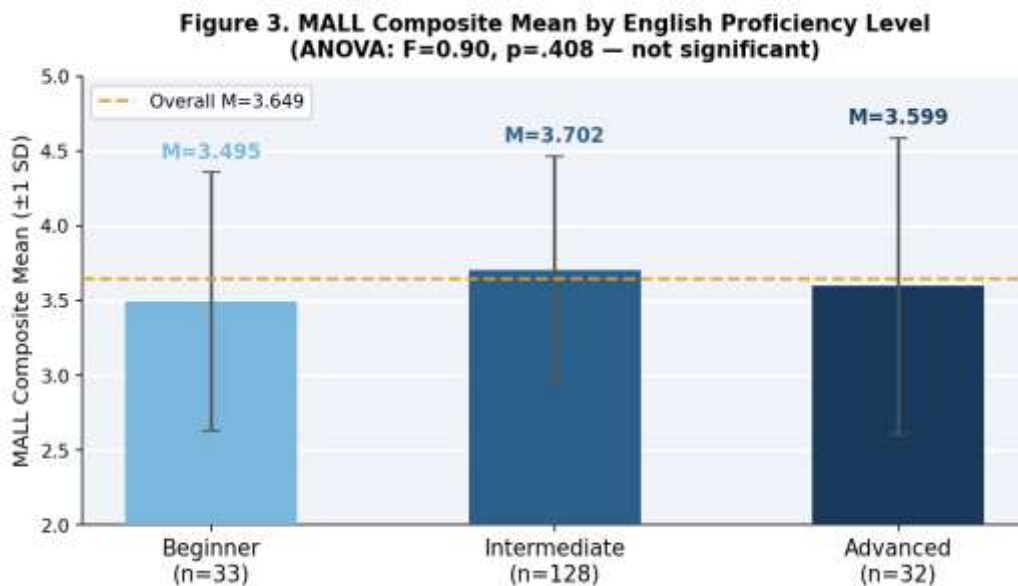
ANOVA results are shown in tables 4 and in figures 3. Contrary to Sections A (Tukey HSD Beginner > Advanced,  $p = .016$ ; Beginner > Intermediate  $p = .022$ ) and B (Tukey HSD Beginner > Advanced,  $p = .013$ ; Beginner > Intermediate  $p = .017$ ), there was no significant difference among the proficiency groups regarding their readiness for MALL ( $F(2, 190) = 0.90, p = .408$ ).

**Table 4**

*One-Way ANOVA: MALL Composite and Section Composites by English Proficiency Level*

Section	Beginner M (SD) n=33	Intermediate M (SD) n=128	Advanced M (SD) n=32	F	p
<b>MALL Composite (D1-D6)</b>	3.495 (0.866)	3.702 (0.765)	3.599 (0.990)	0.90	.408
Section A: Oral Lacks	3.17 (0.67)	2.94 (0.75)	2.66 (0.74)	3.90	.022*
Section B: Legal Reasoning	3.33 (0.69)	3.06 (0.79)	2.79 (0.76)	4.09	.018*
Section C: Gap/Necessities	3.53 (0.79)	3.24 (0.81)	3.20 (0.85)	1.83	.164

*Note.* \* $p < .05$ . Sections A and B: Tukey HSD post-hoc Beginner > Advanced. MALL composite: non-significant.



*Figure 3. MALL composite means by proficiency group ( $\pm 1$  SD). Dashed line = overall M = 3.649.  $F = 0.90$ ,  $p = .408$ .*

#### 4.5 Gender and MALL Use Independence

The comparison of gender is shown in table 5. No significant gender difference emerged ( $t(189) = -1.455$ ,  $p = .147$ ). The results of the chi-square did not meet the criteria for independence of MALL use from proficiency ( $\chi^2(2) = 1.21$ ,  $p = .546$ ). The uptake of MALL is a cross-demographic characteristic, as 81.3% had taken up MALL.

**Table 5**

*Independent-Samples t-Test: MALL Composite by Gender*

Group	n	M	SD	t / p
Male	155	3.608	0.844	
Female	36	3.829	0.711	t = -1.455 p = .147

Note. df = 189. Two-tailed. Prefer-not-to-say group excluded.

#### 4.6 Multiple Regression: Predictors of MALL Readiness

Table 6 and Figure 4 show the regression model.  $R^2 = .341$ ; Section C dominated ( $\beta = .483$ ,  $p < .001$ ); Section B was modest but significant ( $\beta = .154$ ,  $p = .034$ ); Section A was non-significant ( $\beta = .009$ ,  $p = .907$ ).

**Table 6**

*Multiple OLS Regression: Predictors of MALL Composite (Section D)*

Predictor	B	$\beta$	t	p
Intercept	1.529	—	—	—
Section A: Oral/Speaking Lacks	0.009	.009	0.12	.907
Section B: Legal Reasoning	0.162	.154	2.14	.034*
Section C: Gap/Necessities	0.486	.483	7.41	<.001***

Note. DV = MALL composite mean (D1–D6).  $R^2 = .341$ . \* $p < .05$ . \*\*\* $p < .001$ .

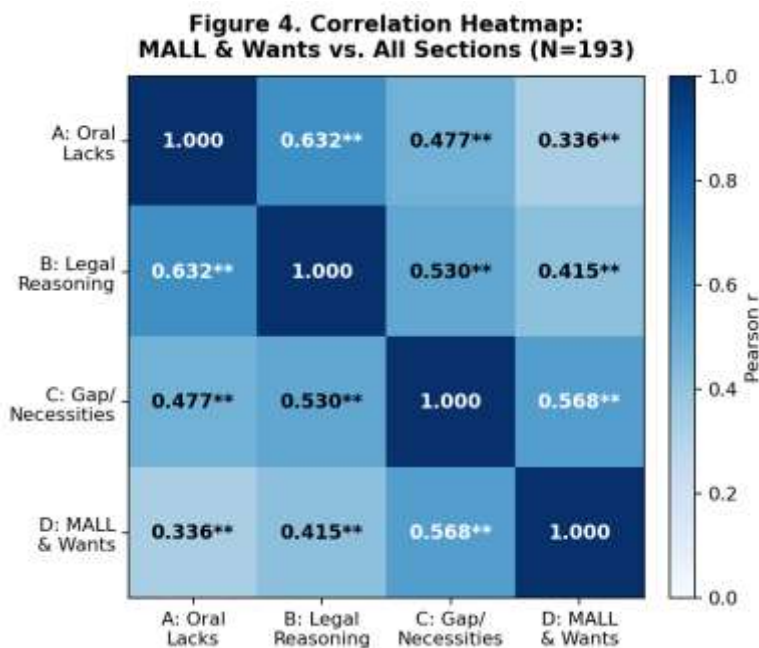


Figure 4. Pearson correlation heatmap: MALL composite and contextual sections (N = 193). \*\* $p < .01$ .

## 5. DISCUSSION

### ***5.1 A Coherent, Uniform, and Cross-Demographic MALL Profile***

The uniformity of the MALL profile across items (range = 0.088), proficiency groups (ANOVA  $p = .408$ ), and gender ( $t p = .147$ ) is a finding of this study that is robust and actionable. All 15 inter-item correlations ( $r = .429-.665$ ) indicate a single motivational cluster, which is in line with Essafi et al.'s (2025) study finding that gender does not have a significant influence on the acceptance of MALL by university students in Muslim countries, and with Musurmanov et al.'s (2025) demonstration that the gains of MALL are empirical unites in professional ESP across ability levels. There is no access barrier for GCUF in terms of implementing MALL because the existing mobile app uptake is 81.3%, an uptake that is not related to proficiency and gender (as shown by a chi-square analysis).

### ***5.2 The Proficiency Bifurcation: MALL Readiness Is Not a Proficiency Proxy***

The ANOVA bifurcation, in which readiness non-significant ( $p = .408$ ) but oral lacks and legal reasoning are proficiency sensitive, has a specific pedagogical implication. Beginner students are also MALL-ready as the advanced students, as they require more intensive scaffolding of sections A and B. This implies that there is no need for differentiation based on proficiency in the MALL module, but that there is scaffolding within the content rather than programme tracks. This matches Nguyen and Nguyen (2024) who found that self-directed learning readiness is equally high across the year groups, and with Habib et al. (2022) mediation model which suggested that self-directed learning readiness and motivation are not a determinant of the adoption of SLL, but rather act as a mediator.

### ***5.3 The Curriculum Gap as the Engine of MALL Motivation***

In the case of Section C ( $\beta = .483$ ,  $R^2$  dominant), the primary predictor of MALL readiness operationalises the 'necessities drives wants' mechanism proposed by Hutchinson and Waters (1987) in a technology mediated register. Students who feel that their current educational programs do not sufficiently address their needs in relation to the demands of their professions are most motivated toward MALL alternatives, though not specifically due to their lack of certain skills (Section A:  $\beta = .009$ , non-significant), rather because of the overall feeling of inadequacy in their current curriculum. This new finding reinforces Estrella's (2025) TAM finding that Perceived Usefulness is the strongest influence on MALL acceptance; that is, the difference between the perceived uselessness of existing instruction and the perceived usefulness of MALL alternatives is the key influence on MALL acceptance. Both Rachmawati (2024) and Naveed (2016) suggest that this gap should be highlighted, and materials should be locally contextualized for these to elicit ongoing engagement.

### ***5.4 Design Implications: A MALL Module for GCUF***

The findings of the present study support the four design principles as given below:

- (1) Universal deployment: The study confirmed that there is no difference between the four groups in terms of proficiency and gender, thus making the full cohort group the target.
- (2) Aspirational anchoring: The study results indicated that the regulatory activities at the module entry should make the curriculum gap explicit to the students, which will activate the regression confirmed motivational mechanism.
- (3) Gap visibility: The study results confirmed that materials should be anchored with authentic legal genres of Pakistan, just as Rashid (2018) and Khan et al. (2024) have suggested.

(4) Contextual grounding: The study results indicated that materials should be based on authentic legal genres in Pakistan as suggested by Rashid (2018) and Khan et al. (2024).

These principles are implemented in Ali's 2024 Flipped Classroom Architecture (MALL) that uses pre-class online delivery combined with face-to-face advocacy practice within the resource constraints at GCUF. Moreover, Fan and Zhang (2024) propose a sequential mediation model where AI literacy and engagement with MALL will maintain the continuance intention as legal practice becomes more reliant on AI-powered drafting and research.

## 6. CONCLUSION

This study offers the law school needs analysis research on law students based on institution, proficiency and regression augmented MALL. Four key findings are made. First, the readiness, beliefs, and aspirational wants all belong to a single coherent motivational cluster with  $r \geq .43$ , for all items, and a uniformly high composite mean ( $M = 3.649$ ). Second, there was no significant difference in MALL readiness across proficiency groups (ANOVA  $p = .408$ ), which is in contrast to the oral lacks and legal reasoning deficits, suggesting that MALL adoption motivation is not based on proficiency. Third, having a female or male user and being current with the use of a mobile app are not significantly correlated with MALL readiness, with 81.3% being the cross-demographic baseline. Fourth, perceived curriculum inadequacy ( $\beta = .483$ ,  $R^2 = .341$ ) emerged as the most dominant predictor of MALL motivation, thus supporting the idea of the mechanism proposed by Hutchinson and Waters (1987) that structural gaps in the curriculum result in the adoption of technology-mediated learning.

They call for the creation of a module of Legal English teaching that is universal, contextual, professionally supported, and based on mobile technology at the College of Law of GCUF, one which uses the advocacy-based critical legal language learning currently lacking in the curricula. The limitations are the cross section study design, single institution study, and self-reported proficiency classification. Future research shall be designed and piloted a MALL module at GCUF and examine the influence of the module on the gains of the student's legal language competence measured.

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