Impacts of LMS Socio-Linguistic and Psychometric Factors on Students' English and Translation Proficiency and Communicative Competence: A Paradigm Shift During COVID-19 Pandemic

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Abstract—This quantitative study investigated the impacts of Learning Management Systems' (LMS) socio-linguistic and psychometric factors on students' English and translation proficiency and communicative competence. The participants were enrolled at the College of Languages and Translation, Imam Mohammed Ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia. The results highlighted the positive experiences students had with the LMS platforms, with a notable frequency of (79.6%). Additionally, a significant percentage (86.2%) affirmed the effectiveness of these platforms in aiding them in achieving academic objectives. However, (52%) indicated that students consistently or often faced challenges when using technology. The findings highlighted improvements in various areas, including linguistic abilities (71.7%), translation skills (73.7%), social skills (62.5%), and psychometric abilities (70.3%), emphasizing the role of online environments in fostering effective communicative skills. The study also revealed the benefits of language and translation technology for students, with (84.1%) using computer-assisted translation, (82.9%) engaging in dubbing and voice translation, and (75.6%) utilizing language audio/video resources. Positive impacts on proficiency and communicative competence were evident, with frequencies of (74.4%) and (69.1%), respectively. These findings underscore the positive influence of technology on language and translation learning, emphasizing communicative approaches that enable students to develop competencies based on language socialization and real-time translation practices. The study recommends ongoing technology training for students and advocates for the use of psychometric tools embedded in LMS to encourage self-assessment and independent learning. The study's significance lies in understanding the intricate relationship between cognition, educational technology, and language and translation learning, particularly in the context of higher education.

Index Terms—English proficiency, psychometric abilities, socio-linguistic abilities, translation competence

I. INTRODUCTION

The COVID-19 pandemic has unpredictably brought new conditions at higher education all over the world. According to UNESCO (2020), the pandemic resulted in the closure of more than (90%) of traditional educational institutions, affecting 1.6 billion students. Education has shifted dramatically to remote approaches, and students were compelled to use online learning as an alternative to traditional face-to-face education. Technology has continued to play a major role in the transformative process of education (Akcil et al., 2021). Online teaching has become the new normal (Basilaia et al., 2020). Digitalization of education has become the preeminent mode for teaching and learning (Wong, 2023). With the aid of digital technologies, education systems have become highly platformised (Williamson et al., 2020). Platformization of learning is the core of the Learning Management System (LMS), which was the most prominent technologies during the pandemic. The LMS is defined as the technology that facilitates online learning when students interact with instructors synchronously or asynchronously (Singh & Thurman, 2019). The LMS platforms encompass effective features, including diverse content and resources, smart boards, and communication tools. The multi-functions platforms that incorporate information communications technology are used effectively for online teaching (Gao & Li, 2021). LMS platforms such as Blackboard, Microsoft Teams, and Zoom have been used widely for learning English and translation due to their appropriate class management features (Aladwani & Alfadley, 2022; Alhaj & Albahiri, 2022). While previous research examined students' perceptions of using LMS, there remains an

unexplored area in the literature concerning the impacts of socio-linguistic and psychometric aspects of LMS on students' proficiency and communicative competence. This is particularly relevant for students who were forced to experience online learning for the first time during the lockdown. Although the LMS platforms play a crucial role, serving as the backbone of remote education, a more comprehensive investigation of the initial experiences of students and teachers in online environments is required (Choudhury & Pattnaik, 2020). Furthermore, there is still a gap in the literature regarding the application of online platforms for teaching translation (Almahasees & Qassem, 2022). The present research serves as a case study, delving into the initial experiences of students with online learning, and the impacts of LMS on their cognitive development. Thus, this study contributes to global reports on higher education conditions during COVID-19 crisis.

II. LITERATURE REVIEW

A. Problems and Benefits of LMS

During COVID -19, many students were compelled to participate in inclusive online classes for the first time, which presented some challenges. Ferri et al. (2020) revealed thematic patterns pointing to technological, pedagogical, and social challenges. Technological challenges were mainly related to unreliability of internet connections, lack of training, and difficulties in navigating the platforms. For example, students expressed the need for substantial enhancements in the functionality of Blackboard applications (Alturise, 2020). Due to technological issues, most students of English and translation desired to return to on-site classroom (Schrijver & Cortez, 2021). Pedagogical challenges were associated with deficiency of professional development, lack of structured content, and insufficient cognitive teaching approaches (Pikhart & Alobaydi, 2023). Teachers were confronted with the new reality that online learning required them to employ new methods for interacting with students beyond simply sending teaching materials through emails (Alsayed & Althaqafi, 2022). Teachers also encountered challenges using remote assessment (Guangul et al., 2020). Social challenges appeared in learners' lack of interactivity and motivation, and insufficient social presence. Students reported that absence of face-to-face communication increased their feelings of isolation (Leal Filho et al., 2021). Adaptation to online settings was a daunting problem, as the transition was sudden, which necessitated designing learning and communication activities with interactive characteristics (Alawamleh et al., 2020). Assaf and Nehmeh (2022) found that social isolation barrier affected negatively (49%) of students. Students had to enhance their productivity in response to the transformative impact of technology on their lives. However, previous studies found that experiencing inclusive online learning has some benefits. For example, during COVID crisis, higher education institutions intensified technology training to use synchronous and asynchronous modes for learning, including Blackboard, Moodle, Teams, Zoom, and Webex, among others. The asynchronous modes include emails, and social media to facilitate communication among teachers and students. In a comparative analysis of synchronous and asynchronous learning, Zhang and Mercado (2022) found that students actively participate in live discussions using Zoom or Microsoft Teams. The study showed that in synchronous online courses, a strong sense of social presence remarkably correlated with students' self-evaluation and grades. Conversely, in asynchronous online courses, students' learning outcomes were less reliably predicted by their levels of learning, cognitive, and social presence. Examining the influence of technology on sociability, Yılmaz and Yılmaz (2023) found that integrating social media into LMS promotes collaborative-groupings, which help learners enhance their verbal communication, utilizing nonverbal cues and audio-visual features. Furqon et al. (2023) indicated that LMS platforms enable students to collaborate and become more flexible in exploring and assessing information related to their daily learning. In their study, Kim et al. (2021) found another benefit for asynchronous learning, highlighting students' development of cognitive and meta-cognitive strategies, resulted in enhancing self-regulated learning.

B. LMS Impacts on Socio-Linguistic Abilities

Previous studies showed that LMS support students' linguistic, social, and psychometric factors in several ways that enhance their proficiency. The MLS platforms offer language and translation resources such as online dictionaries, grammar guides, pronunciation audio resources, and translation tools to help students improve English and translation skills. In this respect, Assiri and Metwally (2020) found that strengthening linguistic ability contributes to shaping competent translators. Similarly, Aladwani and Alfadley (2022) indicate that students develop linguistic abilities within online environments that enhance social interactions. In this view, Muñoz-Martín and Olalla-Soler (2022) emphasized the importance for translators to develop linguistic abilities to possess translation proficiency. To elaborate, there is pressing requirements for translators with linguistic and socio-cultural proficiency, a goal attainable through the enhancement of their linguistic abilities (Jinfang, 2023). In other words, the necessity for qualified translators and interpreters requires overcoming linguistic barriers to ensure multilingual market project success. Being engaged in LMS classrooms, students learn how to bridge the gaps between their theoretical studies and real-time practices. In such environments, they are motivated to develop their socio-linguistic skills. Developing socio-linguistic skills necessitates improving language skills, including listening, speaking, reading, and writing, all of which are essential for performing effectively translation tasks. In their quasi-experimental study, Terzioğlu and Kurt (2022), examined the impact of LMS on speaking and listening fluency, revealing a significant difference in performance achieved by the experimental group that used technology in posttest. In a similar study, Aldukhayel (2021) indicated that students improved their listening

and vocabulary because they had simultaneous access to *vlogging* (video log) resources. Affirming these results, Salahuddin (2020) revealed that developing LMS English programs facilitated learning syntactic and semantic aspects, which influence language correctness. In this light, Mykytiuk et al. (2020) assessed participants' proficiency in grammar, vocabulary, listening, and writing, indicating that the improved performance of the experimental group was attributed to repeated exposure to the visual and interactive aspects of technology platforms, including social media. Findings by Wang (2023) highlighted the beneficial outcomes of online translation instruction that emphasized the connection between language proficiency and translation performance. The study supported previous research that synchronous and asynchronous teaching can lead to substantial academic performance for students when compared to traditional face-to-face approaches. Controversy, Suriaman et al. (2023) found that some students did not benefit from online learning due to problems of materials downloading, and difficulties in understanding the advanced English language of the materials.

Previous studies showed that fluency in a foreign language can be achieved through enhancing sociocultural interactions (Schleef, 2017). Asiri and Metwally (2020) explored the correlation between linguistic competence and translation proficiency, indicating that linguistic low performance is mirrored in translation incapabilities. Su et al. (2021) used Kirkpatrick evaluation model, encompassing *reaction*, *learning*, *behavior*, and *results*, for examining teaching translation fully in online settings, indicating that in spite of technical difficulties, students had positive experiences and were able to achieve most of the program goals because of their interactions with teachers and peers. In this light, Berezenko et al. (2022) revealed that using communicative approaches enhanced communication skills and interactions among students from different socio-cultural contexts. In this regard, Puzanov et al. (2022) found that social media increases students' opportunities of social interactions, and thus, enhances their fluency in communication. Furthermore, since Holmes' (1972) research, considerable studies (Fu & Chen, 2019; Gao, 2021; Lee, 2022; Munday, 2022; Schäffner, 2012; Valdeón, 2021; as cited in Wang & Gu, 2023) have been conducted exploring the communicative approach to translating, enforcing the role of translators in communicating not only information but also culture.

C. LMS Impacts on Psychometric Abilities

Some LMS platforms incorporate adaptive learning technologies that personalize learning experiences based on students' performance and psychometric data, thus, assessment becomes an integrative component of learning. In this respect, Aladwani and Alfadley (2022) indicated that using Microsoft Teams platform motivated students to improve attitudes, interactions, and self-assessment, which resulted in increasing performance. The study also showed that LMS enhanced students' self-study skills. Similarly, Honarzad and Rassaei (2019) found that self-regulated learning management systems enhance students' self-efficacy. Considerable attention in the literature has been focused on self-efficacy. For example, Lin and Wang (2021) investigated the impact of virtual reality on learners' self-efficacy, indicating that using virtual reality for creative projects enhanced intrinsic motivation. Li et al. (2023) examined the relationships between academic self-efficacy, cultural intelligence, and translation competence, indicating significant relationships among predictors of students' competence in translation technology. Yang et al. (2021) examined the impacts of psychometric properties of self-efficacy on translation performance, revealing that quality translation requires an integration of language proficiency and psychometric competences. In this respect, Guanghua (2023) asserted that the linguistic, sociolinguistic and psychometric factors determine translation quality. In other words, the psychology of translators is crucial to translation processes because it involves cognition, emotion, behavior, and social intelligence. Moreover, psychometric factors also refer to psychological measurements and assessments used to evaluate individuals' cognitive abilities, personality traits, and behaviors (Kim et al., 2021). These factors are assessed using standardized psychological tests that can be incorporated into LMS. Furthermore, previous studies revealed that psychometric tests play a major role in evaluating personality characteristics such as extraversion, and introversion. In this respect, Zhang et al. (2021) explored English online assessment practices, indicating that summative assessment was reduced in favor of formative assessment, pointing to the influence of LMS for connecting assessment to daily learning. In a different study, Khodabandeh (2022) explored the applicability of virtual reality to extrovert and introvert learners, indicating that virtual reality enhanced both extrovert and introvert learners' performance. Lin and Wang (2021) found relationships between virtual reality, creativity, and self-efficacy. Hamilton et al. (2021) also found that immersive virtual reality enhanced learning outcomes in approximately (50%) of cognitive studies, enabling students solving conceptual problems. Su et al. (2021) indicated that studying translation online motivated students, linking four elements of cognitive development, namely, reaction, learning, behavior, and results, to real-time practices. Conversely, Arniatika (2020) explored the connection between motivation and extroverted and introverted personality traits, in relation to speaking performance, revealing that while there is an association between extroverted and introverted traits, motivational orientations, and speaking performance, among English learners, instances where extroverted and introverted personalities directly influence motivational orientations and speaking achievement are quite infrequent. In general, socio-linguistic and psychometric factors highlight the importance of appropriate LMS designs, effective pedagogical strategies for languages and translation, and ongoing technology support, to maximize the benefits for students and minimize potential challenges.

D. Technology Effects on Proficiency and Communicative Competence

Since the integration of technology into education, research has been developed using the theory of constructivism. Constructivism is concerned with the logical categories of knowledge, motivating students to construct new knowledge using their learning experiences. Constructivism is based on several principles, encompassing the idea that knowledge is actively constructed rather than merely memorized, that knowledge is shaped within social and cultural contexts, that learning is a dynamic interplay of individual and collaborative efforts, and that assessment should focus on authenticity (Fosnot, 2013). Within this theory, technology provides many opportunities for English and translation students to develop their skills while studying online, accessing various resources that help them develop language and translation proficiency and communicative competence. In this regard, Akcil et al. (2021) indicated that technology, including social media, boosts student-centered resourceful settings when students construct new knowledge, making their learning more socially contextualized and active. Previous research (Almahasees & Qassem, 2022; Li et al., 2023; Terzioğlu & Kurt, 2022) evolved around cognition, language, and translation proficiency in technology- based settings, engaging students in using differentiated applications to develop proficiency and communicative abilities. In this respect, Krüger (2021) found that technology has introduced a plethora of educational resources, including computer assisted tools for translation, machine translation, and localization and assessment, which can be used to enhance linguistic, socio-culture, and psychological competences that are necessary to produce quality translation. Using technology in learning English and translation is a paradigm shift, enforcing the importance of cultural communication. As asserted by Köksal and Yürük (2020), translation/interpretation has always been central to intercultural communication. In the same light, Madkour (2018) affirmed that a shift in the purpose of translation from transferring information into a task of transmitting culture necessitates training students to acquire socio-cultural skills by engaging them in opportunities to discuss diverse cultures of original texts. Furthermore, integrating technology into translation profession, prompting the importance for students to develop various competences to meet the requirements of translator's workflow (Oraki & Tajvidi, 2020; Puzanov et al., 2022; Yang &Wang, 2019). In other words, technology provides numerous opportunities for critical thinking, communication, and collaboration, all of which are essential for achieving proficiency and communicative competence.

III. METHODOLOGY

The current study employed a quantitative design to examine the impacts of using LMS platforms on English and translation students' socio-linguistic and psychometric abilities. The quantitative design helped in investigating the extent to which technology would affect student's proficiency and communicative competence, while examining the frequencies of using technology in online classes.

A. Research Questions

1. What are the most frequent Learning Management Systems (LMS) used in English and translation online classes during COVID-19?
2. What are the impacts of Learning Management Systems (LMS) on students' socio-linguistic abilities?
3. What are the impacts Learning Management System (LMS) on students' psychometric abilities?
4. To what extent can technology affect students' proficiency and communicative competence?

B. Participants

152 students participated in the study, selected from the Saudi female undergraduates who study in the English Department, College of Languages and Translation, at Imam Mohammed Ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia. The number of participants who study English is 70 (46%), while that who study translation is 82 (54%). The participants' age ranges between 18-22 years old. Their mother tongue is Arabic, and they have studied English for 6 years at school before they joined IMSIU. Before COVID-19 pandemic, the instructional approach was centered around traditional methods, supported by (20%) blended learning. The assessment of performance is based on formative and summative evaluation. The participants were not involved in inclusive online learning prior to the pandemic crisis.

C. Instruments and Procedures

The instruments include a 5-point Likert questionnaire, and college technology reports. Data collections also included the university strategic plan for inclusive online learning in order to examine the alignment of LMS usage with academic goals. The questionnaire was distributed after being validated by a pilot study. IBM-SPSS® (version 28) was employed for statistical analysis. Statistical measures were computed, including: (1) frequencies and percentages to understand participants' responses to questionnaire ;(2) Pearson correlation coefficient to assess the internal consistency and validity of the study tool; (3) Cronbach's Alpha coefficient to determine the reliability of the study tool's different dimensions; and (4) mean and standard deviation to examine the participants' responses across study sections.

D. Research Limitations

The present study was limited to 152 female students studying English and translation for four years at a single university. The time span covered by the study was only the first semester of the pandemic lockdown. Further investigations may include students from various courses, both male and female, across different universities.

IV. RESULTS

Pearson correlation coefficient was calculated, indicating a total score of correlation as significant at the (0.01) level. Results also pointed to Cronbach's alpha value of (0.892), which refers to high reliability. Pearson correlation coefficient also showed that variables exhibit statistically significant correlations at the (0.001) level, advocating for notable validity in the study's measures, significantly at the level of (0.01).

A. Answering the Study Questions

Q1: *What are the most frequent Learning Management Systems (LMS) used in English and translation online classes, during COVID-19?*

Frequencies, and percentage of the participants' responses were calculated to show the most frequent LMS that was used (*n*=152)*.* The results showed that a significant number of responses with the percentage of (86.8%), comprising (47.4%) *always*, (19.7%) *often*, and 19.7%) *sometimes* used Microsoft Teams as indicated by the highest frequency of LMS used during COVID-19. The results also revealed the frequencies of (7.9%) *rarely* and (5.3%) *never* that Teams was used. The mean score (*M*) of these frequencies is (3.96), and the standard deviation (*SD*) is (1.212). Zoom ranked the second, with the frequency of (67.1%), including (19.1%) *always*, (17.1%) *often*, and (30.9%) *sometimes.* The lowest frequencies for using Zoom referred to (13.8%) *rarely*, and (19.1%) *never.* The mean score (*M*) for Zoom frequencies is (3.03), and the standard deviation (*SD*) is (1.359). Only (50.6%) pointed to Blackboard as frequently used by the participants, including (15.1%) *always*, (10.5%) *often*, (25.0%) *sometimes*, (24.3 %) *rarely*, and (25.0%) *never*. The mean score (*M*) for Blackboard is (2.66), and the standard deviation (*SD*) is (1.361). Further, a significant number of participants (79.6%) reported in the frequency of (24.3%) *always*, (23.7%), *often*, and (31.6%) *sometimes* that they had positive experience using LMS, while (9.9%) and (10.5%) were in the frequency of *rarely* and *never* respectively. The mean score (*M*) of these frequencies is (3.41), and the standard deviation (*SD*) is (1.253). Figure 1 display the results.
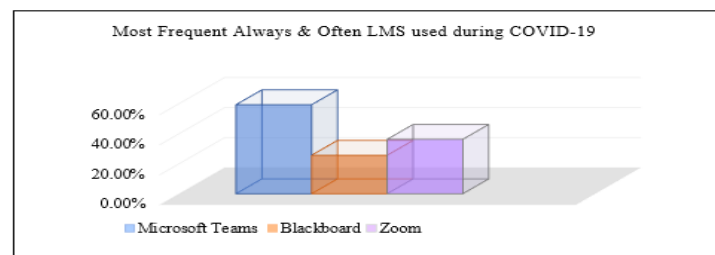

Figure 1. Participants' Most Frequent Always and Often LMS Used

Q2: What are the impacts of Learning Management Systems (LMS) on students' socio-linguistic abilities?

As displayed in Table 1, the results showed positive impacts of LMS on participants' linguistic levels (lexical, phonological, morphological, syntactic, semantic), pointing to (71.7 %) in the frequencies of *always* (21.1%), *often* (16.4%), and *sometimes* (34.2%), as an indicator for improving linguistic abilities, while only (16.4%), and (11.8%) are in the frequency of *rarely* and *never,* respectively. The mean scores of the results are (*M*= 3. 18), and (*SD*= 1.253). The results also showed that responses point to high frequencies of (73.7%), comprising *always* (22.4%), *often* (19.1%), and *sometimes* (32.2%), for improving reading comprehension, while lowest frequencies are reported for *rarely* (15.8%) and *never* (10.7%). A percentage of (62.5%) in the frequencies of *always* (20.4%), (13.8%) *often*, and (28.3%) *sometimes,* showed positive impacts on social skills. Table 1 displays the results with *(M)* and *(SD)*.

TABLE 1
IMPACTS OF LMS ON PARTICIPANTS' SOCIO-LINGUISTIC ABILITIES (N=152)

	Always	Often	Sometimes	Rarely	Never	M	SD
9. The technology I used in LMS during COVID 19 helped me to improve my linguistic abilities (lexical, phonological, morphological, syntactic, semantic levels).	21.1%	16.4%	34.2%	16.4%	11.8%	3.18	1.273
10. The technology my teachers used in LMS helped me to improve my reading comprehension.	22.4%	19.1%	32.2%	15.8%	10.5%	3.27	1.266
11. The technology my teachers used during COVID 19 motivated me to read and translate English literature	20.4%	13.8%	32.9%	17.8%	15.1%	3.07	1.321
12. The technology my teachers used during COVID 19 helped me to increase my English vocabulary and terminology.	25.0%	20.4%	34.9%	11.8%	7.9%	3.43	1.21
13. The technology my teachers used during COVID 19 helped me to improve my reading speed.	29.6%	16.4%	28.3%	13.2%	12.5%	3.37	1.361
14. The technology my teachers used in LMS helped me to improve pronunciation.	28.3%	17.8%	27.6%	17.8%	8.6%	3.39	1.298
15. The technology my teachers in LMS used did not help me to improve speaking skills.	22.4%	13.8%	23.0%	24.3%	16.4%	3.01	1.395
16. The technology my teachers used in LMS did not help me to improve my listening skills.	16.4%	13.8%	27.0%	27.6%	15.1%	2.89	1.295
17. The technology my teachers used during COVID 19 helped me to improve my translation skills.	19.7%	20.4%	29.6%	19.7%	10.5%	3.19	1.259
18. The technology my teachers used in LMS helped to improve English / translation using online dictionaries.	40.1%	17.1%	28.3%	9.2%	5.3%	3.78	1.219
19. The technology I used in LMS helped me to improve my social skills (interaction/collaboration).	20.4%	13.8%	28.3%	15.8%	21.7%	2.95	1.411

As displayed in Table 1, a high frequency of (67.1%) including (20.4%) *always*, (13.8%) *often*, and (32.9%) *sometimes*, referred to LMS impacts on reading and translating. A significant rate of (80.3%), comprising (25.0%) *always*, (20.4%) *often*, and (34.9%) *sometimes* pointed to positive impacts on enriching vocabulary and terminology. A rate of (73.7%), including (28.3%) *always,* (17.8%) *often*, and (27.6%) *sometimes,* indicated impacts on pronunciation. Moderate impacts are shown regarding speaking skills, referring to (59.2%), comprising *always* (22.4%), *often* (13.8%), and *sometimes* (23.0%), and (57.2%) pointing to listening skills, including *always* (16.4%), *often* (13.8%), and *sometimes* (27.0%). Additionally, the rate of (69.7%) pointed to impacts on improving translation skills, including *always* (19.7%), *often* (20.4%), and *sometimes* (29.6%). The results also showed the rate of (85.5%) referring to technology impacts on improving English and translation using online dictionaries. Findings also indicated that LMS helped the participants achieve their learning outcomes, as a significant high frequency of (86.2%), representing (36.7%) *always*, (22.4%) *often*, and (27.0%) *sometimes*) reported that the LMS platforms were effective in helping them achieve their academic objectives, in contrast to the rate of (8.6%) referring to *rarely*, and (5.3%) *never*, respectively (*M* = 3.77, *SD*=188). Figure 2 displays the results.
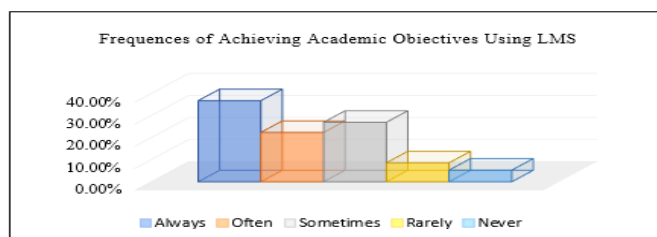

Figure 2. Participants' Achieved Academic Objectives Using LMS

Additionally, the results also showed the technology tools that the participants used while engaged in online learning. The applications that they used while using the LMS, pointed to the percentage of (84.1%) for Computer Assisted Translation (CAT), followed by (82.9%) for dubbing and voice translation, and (78.0%) for voice transcription. The lowest rates refer to (71.9%) for terminology management, and (70.7%) for both OmegaT, and Vocaroo recorder. Regarding language tools, the rate of (92.8%) pointed to using online dictionaries, and (88.5%) for VOA audio/ video language skills. The lowest rate refers to (71.4%), for Grammarly. Table 2 shows the results.

TABLE 2
LANGUAGE /TRANSLATION TOOLS USED BY PARTICIPANTS (*N*=152)

Translation/ Interpreting Tools (*n*=82)	Frequency	Percent	Language Tools (*n*=70)	Frequency	Percent
Computer Assisted Translation CAT	69	84.1%	Online dictionaries	65	92.8%
Translation memory tool OmegaT	58	70.7%	Bilingual Glossaries	60	85.7 %
Compute Assisted Interpretation CAI	62	75.6%	WordWeb	58	82.8%
Bing Translator	60	73.1%	VOA audio/ video (language skills)	62	88.5%
Voice Transcription	64	78.0%	Fluent U	55	78.5%
Dubbing and Voice Translation	68	82.9%	English Pronunciation IAP	61	87.1%
Vocaroo Voice Recorder	58	70.7%	Google Translate	60	85.7%
Terminology Management	59	71.9%	Grammarly	50	71.4%

Q3. What are the impacts Learning Management System (LMS) on students' psychometric abilities?

A significant majority of participants (70.3%), including *always* (18.4%), *often* (11.8%), and *sometimes* (40.1 %) believed that technology positively impacted their psychometric abilities, including self-assessment, self-efficacy, motivation, and attitudes. In contrast, low frequencies of (15.1%), and (14.5%), representing *rarely* or *never* point to negative impacts on psychometric abilities. The results also revealed (68.4%), including *always* (21.1%), *often* (19.7%), and *sometimes* (27.6 %) pointing to positive impact of technology on communicative skills, which reflect participants' personality characteristics of extraversion, and flexibility to communicate and convey information in different social contexts. Table 3 displays the results with (*M* and *SD*).

TABLE 3
IMPACT OF LMS ON PARTICIPANTS' PSYCHOMETRIC ABILITIES (*N*=152)

	Always	Often	Sometimes	Rarely	Never	M	SD
20. The technology I used in LMS helped me to learn new communicative skills (convey information).	21.1%	19.7%	27.6%	14.5%	17.1%	3.13	1.365
21. Modern technology I used in LMS had positive impact on my psychometric abilities (self-assessment/ efficacy/motivation/attitude).	18.4%	11.8%	40.1%	15.1%	14.5%	3.05	1.262
22. The social media I used had positive impacts on my communicative competence.	15.8%	17.1%	36.2%	15.1%	15.18%	3.02	1.263
23. The results of my English courses that I achieved in online classes are worse than the results I achieved in traditional classrooms.	22.4%	15.8%	22.4%	21.7%	17.8%	3.03	1.411
24. Based on the results of my final exams, using technology had positive effects on my English language and translation proficiency.	22.4%	19.1%	32.9%	14.5%	11.2%	3.27	1.271
25. I received adequate training for using technology in studying my English courses online.	15.1%	12.5%	35.5%	11.8%	25.0%	2.81	1.351

As displayed in Table 3, the results also revealed the frequencies of the participants' self-assessment using LMS psychometric tools, pointing to the percentage of (70.3%), comprising (18.4%) *always*, (11.8%) *often*, (40.1%) *sometimes* (15.1%), *rarely,* and (14.5%) *never (M* = 3.05, SD= 1.262). Figure 3 displays the results.
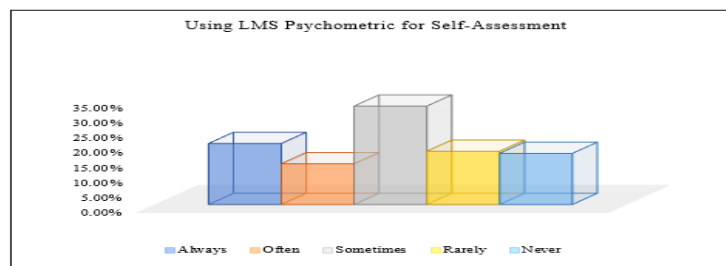

Figure 3. Participants Used LMS Psychometric Tools for Self-Assessment

Q 4. To what extent can technology affect students' proficiency and communicative competence?

The results showed the positive impacts of technology on the participants' English and translation proficiency, with the frequency of (74.4%) including (22.4%) *always,* (19.1%) *often*, (32.9%) *sometime,* in contrast to the low frequency of (25.7%), including (14.5%) *rarely*, and (11.2%) *never*, with (*M* = 3.37, *SD*= 1.272). However, the frequency of (52%) of, combining *always* or *often* showed the difficulties of using technology in spite of technical support and training. Further, a frequency of (69.1%), perceived technology as (15.8%) *always*, (17.1%) *often*, (36.2%) *sometimes,* enhanced their communicative competence, in contrast to the low frequency of (30.9%), comprising (15.1%) *rarely*, and (15.8%) *never*, with (*M* = 3.02, *SD*= 1.263). Figure 4 and Figure 5 display the results.
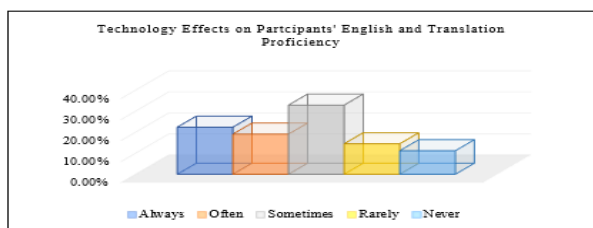
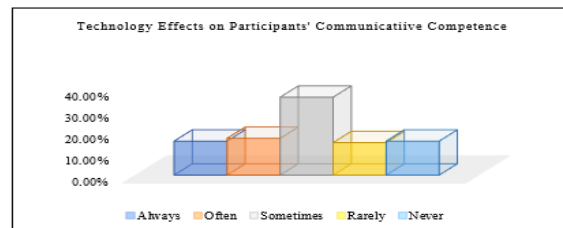Figure 4. Effects of Technology on Participants' Proficiency

Figure 5. Effects of Technology on Participants' Communicative Competence

B. Technology Report Results

The results revealed the alignment of technology implementation with college goals as the report showed that the college executed the plan of the university during COVID-19, providing weekly training programs, accumulated to 80 sessions in one semester, using LMS platforms including Blackboard, Microsoft Teams, and Zoom. The online workshop format was the most appropriate tool to provide the training because of its manual, audio, and video tutorials, and visual presentations. Difficulties of using LMS include logging in, loading problems, and platform functionality challenges. The results also revealed a paradigm shift model from face-to-face to online settings. The model was based on the university vision for delivering the academic programs through a stimulating environment, and computerized management systems. The model served as a cycle of a sudden transformative change from traditional classrooms to inclusive online settings. Figure 6 displays the model.
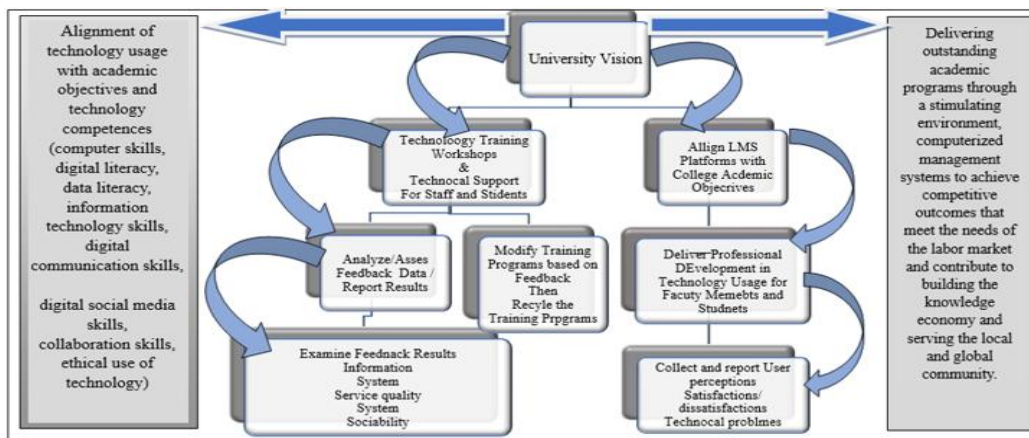

Figure 6. IMSIU Model for Sudden Shift from Face-To-Face to Online Classes During COVID-19

As shown in Figure 6, the cycle started when the university administration sent instructions to departments and colleges simultaneously to attend the training programs. The responsibilities of the technology department focused on preparing the workshops, providing technical support, receiving feedback, then sending feedback to technology experts for analysis and assessment of modification plans. The cycle moves on to college experts to deliver the online workshops among staff and students, then receive feedback and send it to university technology department to start a new cycle of data analysis and modifications to ensure best results. This model was operationalized through using social media communications, including WhatsApp, Telegram, Twitter (renamed now as X), and emails. Results showed a preference for using emails (80%), WhatsApp (75%), Telegram (68%), Facebook (64%), and Twitter (39%).

V. DISCUSSION AND FINDINGS

The findings indicated that Microsoft Teams was the preferred LMS with a significant frequency of (86.8%). A high percentage (79.6%) showed that language and translation students had positive experiences using LMS. This was affirmed by (86.2%), highlighting the effectiveness of LMS platforms in helping them achieve academic objectives. The data suggested that the LMS played a crucial role in facilitating online learning (see Figure 1). In harmony with these findings, Aladwani and Alfadley (2022) asserted that Microsoft Teams platform is effective in helping students achieve their learning outcomes due to its enriched content tools and easy navigation. Previous studies (Alha & Albahiri, 2022; Almahasees & Qassem, 2022; Alsayed & Althaqafi, 2022; Alsofi, 2021; Suriaman et al., 2023) revealed that the LMS platforms are effective in language and translation learning, provided the availability of ongoing training. These studies emphasized the appropriateness of LMS in contributing to student substantial learning achievements. Inconsistent with these results, studies (Alawamleh et al., 2020; Basilaia et al., 2020; Furqon et al., 2023; Leal Filho et al., 2021) highlighted students' dissatisfactions with online learning due to lack of interactions, and unreliable evaluation system. The present study findings refer to (52%) of students *always* or *often* face difficulties using

technology in spite of technical support and technology training. These results are in harmony with previous research. For example, Alturise (2020) concluded that some LMS platforms, including Blackboard, need substantial enhancements in the functionality of applications.

Other findings of the current study showed positive impacts of LMS on students' socio-linguistic levels reveled by (71.7%) (see Table 1). In alignment with these results, Aldukhayel (2021) revealed that LMS platforms have positive effects on linguistic performance, specifically, in terms of speaking fluency, listening skill, and vocabulary enrichment. Salahuddin (2020) indicated that developing LMS English programs facilitated learning syntactic and semantic aspects that influence language proficiency. In the same light, Mykytiuk et al. (2020) found improvements in language proficiency, including grammar, vocabulary, listening, and writing abilities. Alhaj and Albahiri (2022) found that using technology in written translation, facilitated collaborative learning to acquire translation skills. In the current study, (73.7%) of students improved translation abilities in online classes due to the diverse contents of LMS platforms. The findings also showed that language and translation tools were found to be useful for students (see Table 2). In this context, Krüger (2021) found that technology tools can be used to enhance linguistic, socio-culture, and psychological competences that are necessary to produce quality translation.

Additionally, the current study findings revealed the impacts of the LMS on students' social skills as (62.5%) referred to improvements in interaction, engagement, and collaboration, indicating that collaborative and interactive online learning environments contribute to developing socio-linguistic abilities, and emphasizing its role in fostering effective communication, which is central to language and translation education (see Table 3). Consistent with these findings, Puzanov et al. (2022) found that technology, including social media, increases students' opportunities of social interactions, and thus, enhances their fluency in communication in English. In the same perspective, Byram (2021) presented a model for intercultural communicative competence, composed of aligning 'intercultural competence' and 'communicative language competence', in terms of linguistic competence, and sociolinguistic competence. In this respect, Madkour (2018) asserted that the relationship between translation, linguistics, education, and social anthropology necessitates the enhancement of the communicative approach to language and translation by providing students with training programs to acquire socio-cultural skills. Students need to develop their communicative language and translation competences because translation is based on language socialization, i.e. real-life practices, which need conveying different cultures while applying syntactic and semantics strategies. New perspectives on translation studies, drawn from Holmes' (1972) research have been developed to understand the integration between socio-linguistic and psychological abilities, and translation quality, strengthening translators' competences. According to Holmes, translation psychology is concerned with research dealing with the process or act of translation itself, including translators/interpreters' skills, competences, performance, and work conditions. In this light, the current study findings on students' psychometric abilities pointed to a significant frequency of (70.3%), indicating that technology positively impacted students' psychometric abilities (see Table 3), emphasizing its potential for enhancing cognitive skills related to cognition and online learning. The findings also indicated that students improved their motivations, self-assessment, self-efficacy, and self-regulated learning. In harmony with these findings, Furqon et al. (2023) found that using LMS platforms enabled students to effectively collaborate and become more flexible in scrutinizing and evaluating information related to daily learning. Kim et al. (2021) revealed that psychometric tools help in assessing cognitive abilities, and psychological attributes such as personality traits, behaviors, attitudes, and motivation. The current study findings also revealed that technology has positive effects on the development of students' language and translation proficiency and communicative competence indicated by (74.4%), and (69.1%) respectively, highlighting the role of technology in facilitating effective contextual communication (see Figure 4 & Figure 5). These findings are in harmony with previous studies. For example, (Klimova & Pikhart, 2023; Oraki & Tajvidi, 2020; Schrijver & Cortez, 2021) asserted that there is a relationship between cognition and language and translation proficiency in technology- based settings, when students use differentiated digital applications to develop linguistic and communicative domains. The evidence from the current study findings emphasized that adaptive learning technologies are designed to personalize and optimize the learning experience for language and translation students. These technologies use data-driven insights to adapt instructional content and resources to meet the needs, abilities, skill level, learning style, and progress of each learner.

VI. RECOMMENDATIONS AND CONCLUSION

The present study has a number of implications. The study highlights the impacts of technology on students' socio-linguistic and psychometric domains that influence language acquisition and translation skills by providing exposure to authentic language materials, interactive translation exercises, and communication opportunities in real-time practices. The LMS platforms contribute to improvements in students' language and translation proficiency and communicative competence, offering structured contents, audio-visual tutorials, and social contexts that affect their intrinsic motivation, interaction, and collaboration. The shift towards online learning provides students with personalized contents that can help them achieve self-efficacy, urging them to appreciate autonomous learning. Educational technology provides students with some challenges that motivate them to think critically, solve complex problems, while developing self-regulated learning strategies. In addition, the cycle model (see Figure 6) that was employed at IMSIU for inclusive transformation from traditional classrooms to online education, using various LMS platforms, can be replicated in

different universities worldwide, for developing online language and translation programs that link together cognitive approaches and learning theories. This shift requires fully transformation from direct presence in the classroom to technologically mediated telepresence in online classes, which necessitates rethinking the purpose and relevance of language and translation teaching and learning. In online settings, language learning does not depend on memorizing rules, but rather on constructing new knowledge based on students' personalized experiences when they use English to communicate in diverse socio-cultural real-time contexts. In online settings, students learn that translation is not concerned merely with rendering information bur rather transmitting culture. Online learning also necessitates continuous technology training within an environment that provides incessant technical support. Therefore, the study recommends enhancing the infrastructure of online platforms, and incorporating technology resources to maximize students' learning outcomes. To wrap up, this study explored the challenges that language and translation students encountered during the lockdown of COVID-19, at IMSIU, in Saudi Arabia. The study aimed to examine the effectiveness of the LMS platforms in helping students develop their socio-linguistic and psychometric abilities that influence their language and translation proficiency and communicative competence. The findings revealed that the socio-linguistic aspects are intertwined with psychological evaluations that can be used to assess students' cognitive capabilities while using various LMS platforms. The study presents the cycle model that was used during the pandemic lockdown to transform the traditional classes into fully online settings, highlighting the positive impacts of educational technology on students' achievements. As such, the study contributes to global reports on higher education conditions during the crisis of COVID-19.

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