A Survey on Investigating the Relationship of Learner Engagement and Motivation of The Undergraduate Engineering Students' During Covid Online Education

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Abstract— **The Indian educational system has switched from offline instruction to digital learning because of the covid epidemic. The new educational paradigm has its benefits and drawbacks. A wide range of methods and strategies for efficient language instruction have been developed in online education. The study analyses the undergraduate engineering learners' engagement level and preferences for learning methods during the covid period. Additionally, it aims to discover and evaluate numerous sources, strategies, and language activities employed explicitly in teaching and learning English. The researcher prepared a semi-structured questionnaire. The questionnaire was developed using google Forms, and it is circulated. Open-ended and closed-ended Likert scale questions are included in the survey to measure respondents' opinions about online English language instruction and how online education affects the students' engagement, motivation, and knowledge of the course material. Over 75% of the participants prefer online teaching over offline teaching. 36% of the students affirm that they miss traditional classroom teaching compared to online teaching. Most participants (55.90%) said using virtual language learning tools like computers, tabs, mobile phones, laptops, iPad, Learning Management Systems, virtual conference apps, and smartphone learning applications during the course was simple. Almost 55% of the participants agreed that their engagement level (Item 3) and content comprehension (Item 4) is comparatively high during online education due to the language aids and activities. Over 53% of the learners affirmed that they have attentional problems (Item 6), like distractions, and use effective attention strategies (Item 10) to stay focused in online classes. Covid has shifted educational practices to online for the past three years. Online classes have both advantages and disadvantages in English language learning. Learners affirmed that they have attentional problems, like distractions, and use effective attention strategies to stay focused in online classes. When the learner's engagement level is high, learners' content comprehension, attention and academic achievement were relatively high in the covid period.**

Index Terms— **Engineering education, Language instruction, online education, E-resources, Survey**

I. INTRODUCTION

The pandemic virus coronavirus 2 (SARS-CoV-2) has its outbreak in 2019. In India, the first outbreak was recorded in January 2020. Coronavirus has affected 4.47 crore people in India, whereas, in Tamil Nadu, 35.8lakh people have been affected by the deadly virus. According to the case report of the Indian government, 214 cases were recorded in January 2023. The coronavirus epidemic that has plagued India for the past three years has caused a shift in classroom instruction from traditional to virtual. Education is one of the important facets of life and it has entered a "new era." This is due to the way technology affects communication and transforms the teaching into a digital medium.

Engineering education is highly significant for effective functioning of the industry, IT, chemical industry, automobiles and other core companies. The development of high-quality engineering education in India is essential to the future development of the Indian economy, particularly given the industry's worldwide competition in software and other industries including the manufacture of engineering tools, chemicals, and automobiles. India has highest number of engineering colleges yet unemployment also exists in India due to the communication incapabilities of the engineers. Engineering education should be effective in India to impart better knowledge and English language communication. However, covid has created pedagogic shift from offline education to online education which increased the challenges of engineering instructors to introduce new teaching methods to render effective content knowledge to the students. The demands of technical professions are increasing day by day and the developing employment market in India increases the obstacles like communication gaps, low proficiency among engineering graduates and low critical thinking skills for engineering education in India in the twenty-first century. Science, technology, engineering, and math (STEM) abilities, statistics, and data analysis skills, for example, are of the utmost importance. Researchers have discovered certain widely valued, yet tough talents for the global workforce. In addition, India has to rethink both India Inc. and its technical/engineering education system incorporating new technologies and aids for fostering better education in engineering subject. Darling-Hammond(2009) says that professional improvement and teachers innovative teaching practice will improve the effectiveness of engineering education.

Flipped classrooms are increasingly widespread in developing adaptable techniques and approaches for efficiently presenting the material in the English language classroom. Apps, webpages, learning management systems (LMS), and eLearning tools evolved into versatile instructional tools for teaching English online. Online learning is accessible, adaptable, and effective for teachers and students. As a result of the epidemic, students nowadays face a range of challenges to overcome as well as opportunities and challenges to learn new skills and knowledge. The global economic downturn has resulted in the decline of pandemic engineering education. According to ECLAC data, the literacy ratio has declined among the poor due to the economic downturn and dropped from 3.6% to 9%. According to the ECLAC report, those susceptible to a pandemic will discontinue getting an engineering education, including higher education.

Therefore, pandemic education policies should provide education as prime importance, and the government can aid technological support to a vulnerable population. As a result, the Indian government has offered a variety of initiatives like online degree and diploma programs, online programs, television, and computer for higher education. India provides comprehensive programs in higher education through entities like the AICTE, University Grants Commission, Consortium for Educational Communication, National Council of Educational Research and Training, National Programme on Technology Enhanced Learning, TNSCERT, and IGNOU that allow students to enrol in online degree programs and platforms. Free courses are offered on websites like NPTEL. Online education has provided excellent learning chances, but the learners' academic performance is greatly influenced by the student's creativity and degree of comprehension. Due to its simplicity and versatility, YouTube has attained a significant role in knowledge gaining and pandemic education.

Technology in English language education promotes teaching and learning techniques that help learners become more engaged, proficient in the language, and motivated to study English on an internet platform (Ayu, 2020). Since language learners are expected to be autonomous and self-sufficient, students confront challenges when the educational system changes in response to the epidemic (Muliyah et al., 2020). However, using virtual learning through an online platform has positive and adverse consequences on students' attitudes and opinions. Because both students and teachers feel comfortable and enjoy the opportunity of systematic, practical, accessible and adaptive learning experiences in online learning. (White, 2008). In order to offer the professors lectures to their students remotely, UNESCO (United Nations Educational, Scientific, and Cultural Organization) proposed virtual learning systems and other educational apps to disseminate knowledge to each learner and global learners. (Bansal, 2020). Jose and Abidin (2016) assert that Online interactions could encourage participants to increase their knowledge of and proficiency with grammar. Effective language acquisition is crucial for educational progression throughout the epidemic. Many language teachers have implemented synchronous learning. Synchronous online learning is the integration of synchronous and asynchronous online learning formats so that students may interact with the content information whenever and wherever they choose while simultaneously participating in synchronous sessions that take place in real-time. (Martin et al., 2020).

The National Survey of Student Engagement (NSSE) was introduced in 2000, and the survey results shows that the student engagement in learning has become a significant measure of the quality of courses in higher education (Hsieh, 2014). Austin (1993) and Feldman (1994) state that learner engagement has significantly improved through "academic involvement, involvement with faculty, and involvement with student peer groups". Learner engagement enables the learners to actively participate in the learning process by spending time and effort (Skinner et al., 2008; Luan et al.,2020). The two components of student engagement are "behavioural engagement and emotional engagement". Behavioural engagement focuses on students' effort, commitment, and consistency in the learning process, whereas emotional engagement addresses students' interest in learning (Skinner et al., 2008). Numerous studies have shown that student involvement enables learners to learn (Martin, 2018) and provides quality online learning (Heo, 2021).

In order to improve academic achievement, learner engagement is a significant factor in online education. According to Handelsman et al., measuring students' engagement is advantageous to teachers when they are interacting with individual learners or structuring the learning environment (Oraif & Elyas, 2021). Throughout the literature, the concept of "engagement" has been discussed in many ways. The reasons for this variety include how engagement is perceived in various circumstances, as well as how it is influenced by and related to the educational environment. For instance, Bundick et al. pointed out in their review that interactions among the three main components of the classroom environment—the student, instructor, and content—can have an impact on student involvement. In order to conceptualize how student engagement may be encouraged in the classroom, they consequently proposed a conceptual framework based on a prior model of classroom teaching and learning (Elyas, 2020).

Various survey study highlights the significance of learner engagement in time management (Heo et al., 2020), secondary school language teachers (Tamah, 2020), "Household adaption schooling" (Bacher-Hicks, 2021), higher education (Sayad et al., 2021), Resource Management (Heo et al.,2022), Online course (Oraif, & Elyas, 2021), Chinese education (LI etal., 2021), tertiary level students (Ngo, 2021), Nursing education (Chan et al., (2021), and among EFL learners of Vietnam (Ngo, 2022). Hence the present study aims to analyse the learner engagement and motivation among undergraduate engineering students during covid online education scenario. The study also aims to identify the effectiveness of various multimodal and online tools employed to increase the engagement of the learners.

The objective of the study is to highlight student engagement, self-motivation, and willingness, as well as challenges and advantages in engineering education through online modalities. Online learning modes significantly influence learners' engagement and learning outcomes. Therefore, the current study examines the learners' attitudes toward online learning modes and their level of engagement during the covid period. Additionally, it aims to find and examine multiple online resources, programs, and language exercises utilized explicitly in teaching and learning the English language. Online learning, however, depends on accessibility, adaptability, flexibility, and affordability. It examines the participants' response towards the pandemic condition in terms of engagement, motivation, attentiveness, and knowledge. The questionnaire was circulated to language learners as part of the survey study, and quantitative data analysis was performed using IBM SPSS. Tests like reliability test (Cronbachs alpha test), Validity (Bivariate analysis), Data normality test, Descriptive analysis, Frequency test, linear regression and multiple linear regression were

performed to analyse the data quantitatively. The study examines how multimodal English language learning tools help students and teachers to manage the difficulties and challenges of virtual learning to enhance engagement and attention levels.

II. MATERIALS AND METHODS
Research Questions and Objectives
1. What are the online technological tools and websites that English language instructors use for effective learning in the covid scenarios?
2. How attentive and engaged are the students in an online language course?

The goal of the study is to investigate the effectiveness of digital technologies in learners' engagement, motivation, and knowledge comprehension, in the paradigm of the covid scenario. It also examines the attentional techniques and linguistic activities used among students and teachers to teach English.

Study design and Participants of the study
The method employed a quantitative cross-sectional study design. The study is performed in India, the state of Vellore. English is recognized as a second language in India. The samples of the study were undergraduate engineering students. Nine hundred students participated in the research survey where eight hundred and sixty students (both male and female) participated in the research survey. This study aimed to examine the attitude of English learners towards technology-mediated education in engineering students. The questionnaire was circulated to three engineering colleges in Vellore city while covid period and post-covid period. Criteria for the survey samples are Urban Engineering College, Undergraduate Engineering ESL students, learners with smartphone and internet facilities and learners who have given agreement (consent) to take part in the study. Consent was obtained from the students in the first page of the google form.

Research Tool
The researcher prepared a semi-structured questionnaire. The questionnaire was developed using google Forms, and it is circulated. Open-ended and closed-ended Likert scale questions are included in the survey to examine respondents' opinions towards learners' engagement, concentration, motivation, and comprehension of the content knowledge during online language classrooms. The survey questionnaire was created based on recent research on language learners' engagement, motivation and attention. The questionnaire consists of five open-ended questions and sixteen Likert scale responses (5- Strongly agree to 1-strongly disagree, and one item with yes or no question). The succeeding Likert scale was used to analyze the mean scores: low = 1.00–2.60, moderate = 2.60–3.40, and high = 3.41–5.00. The information collected from the questionnaire was quantitatively examined and interpreted to measure learners' opinions on online language instruction. The questionnaire also contains descriptive questions to identify the various multimodal tools, learning management systems, video conferencing tools and language websites which was used in the English classes to foster effective knowledge to the students.

Statistical analysis
Data collected were analyzed both qualitatively and quantitatively. Data collected from the survey were quantitatively analyzed using SPSS Statistics software. Tests like frequency tests and descriptive statistics to identify the range, sum, percentage, standard deviation and variance were carried out to describe the basic features of the participants. The data were analyzed for internal consistency, and reliability was checked in SPSS using Cronbach's alpha. The Cronbach alpha test value was found to be 0.716 for 16 items. Bivariate analysis using the Pearson Correlation method was performed to analyze the validity of the text. The result shows that the Pearson Correlation value was 0.321-0.679 for 16 items, and the significance value (p-value) is below 0.05(ranging from 0.03-0.00 for 16 items). Hence, through the data analysis, the data obtained from the survey respondents are valid and reliable.

Data Collection and Ethical consideration
Samples were selected for the study based on the GARP guidelines of the Indian university Grants Commission. The study also followed the checklist of Cherries. The survey is an open survey, where the google form was sent to the engineering students of Vellore engineering colleges. Primary demographic data like name, email id, age and institution name were obtained from the participants. Detailed explanation was given to the participants on the beginning page of the google form, and consent was obtained from the participants. Requisite permission was obtained in the engineering colleges of Vellore city, and consent for voluntary participation was obtained from the samples as a foreword page in the google form. The participants of the study have the freedom and right to withdraw from filling out the form before submitting it at any point in time. The google form was sent to the institution management, and it was shared with the participants through email id and WhatsApp groups. Data obtained from the participants were interpreted and analyzed anonymously and confidentially.

III. RESULT
Table 1 presents the demographic characteristics and features of the participants. The questionnaire was circulated to 860 participants; among 860 participants, 35% were aged between 20 and 21, whereas thirty-four percentage participants were between 18 and 19. 29% of the participants were aged between 21 and 22. The total number of female participants (52%) was of more significant proportions when compared to male participants (47%). Among 860 participants, 42% of the participants' studied at the Vellore Private Engineering college, whereas 33% of the participants studied at the Vellore government engineering college. Over 24% of the participants' studies in the Vellore were deemed university. Over 75% of the participants prefer online teaching over offline teaching. 36% of the students affirm that they miss traditional classroom teaching compared to online teaching.

Table 1: Demographic Characteristics of the survey participants(N=860)

Items	Category	N	%
Age (Mean: 21, SD:4.32)	18-19 Years	296	34.41

		20-21 Years	308	35.82
		21-22 Years	256	29.77
Gender		Male	410	47.67
		Female	450	52.32
Institution		Vellore Private Engineering college	367	42.67
		Vellore Government Engineering college	286	33.25
		Vellore Deemed to be University	207	24.06
What would you recommend for teaching the English language during the covid and post-covid periods?		Virtual Instruction	645	75
		Traditional Instruction	215	25
Did you miss traditional offline teaching?		Yes	311	36.16
		No	549	63.83

Table 2 represents the descriptive statistics of items related to Online Teaching and Engagement level. Over 55.90% of participants affirmed that (Item 1)during the COVID time, it is indeed simple to use virtual language learning resources, including computers, smartphones, tabs, iPads, Learning Management Systems(Moodle), and video conferencing apps(Zoom). Nearly 474 participants affirmed that they often get focused on the language activities given in their classroom (Item 2). Almost 55% of the participants agreed that their engagement level (Item 3) and content comprehension (Item 4) is comparatively high during online education due to the language aids and activities. Over 53% of the learners affirmed that they have attentional problems (Item 6), like distractions, and use effective attention strategies (Item 10) to stay focused in online classes. Survey results confirm that 51.9% of participants affirmed that they switch on their laptop and often visits websites, games and advertisements (Item 7). Nearly 31% of the students admitted that, when using their computers while identifying materials for their language learning activity or while taking online classes, they regularly click the weblinks of attractive or interesting commercials, graphics, or blog sites without realizing it. More than 38% of the participants admitted that they had difficulties using the internet to learn and write the language, and they unintentionally opened other applications, webpages, or their smartphones.

Table 2: Online Teaching and Engagement level

Survey Questions (N=860) Items	Frequency					Mean	Std. Dev	Variance	Range
	1	2	3	4	5				
Item 1	245	230	200	105	80	3.67	1.021	1.043	4
Item 2	50	109	227	241	233	4.01	0.816	0.666	4
Item 3	12	78	281	242	247	3.77	0.928	0.861	4
Item 4	100	66	251	230	213	3.50	0.935	0.876	4
Item 5	120	232	280	117	111	2.77	1.204	1.450	4
Item 6	101	148	152	223	236	3.87	0.812	0.661	4
Item 7	128	262	226	141	103	2.57	1.048	1.099	4
Item 8	117	259	215	145	124	2.84	1.242	1.544	4
Item 9	136	165	226	156	176	3.20	0.973	0.948	4
Item 10	112	123	151	240	234	3.69	1.023	1.047	4

Table 3 represents the descriptive statistics of language learning and language tools. Almost 36.59% of the students have improved their vocabulary skills through English language exercises and engagement in online classes. Over 47.67% of those polled said they frequently use mobile or laptop applications or websites related to English language learning while attending online programs. The respondents, over 49%, confirmed that language instruction is crucial and highly significant in online classes. The majority (61.97%) of the participants agreed that they have significantly developed their English proficiency and function of English grammar through English language learning instruction and tasks in an online classroom. Over 80% of the participants often use dictionaries, glossaries and thesaurus to develop the language learners' knowledge of the English language. Almost 54% of the learners agreed that they attend online degree programs and weekly courses in Massive Open Online Courses (MOOC), IGNOU, Coursera, Udacity, SWAYAM, Udemy, Alison and NPTEL to enhance English language learning.

Table 3: Learner language learning and Language tools

Survey Questions (N=103) Items	Frequency					Mean	Std. Dev	Variance	Range
	1	2	3	4	5				
Item 11	123	172	250	200	115	3.29	0.847	0.718	4
Item 12	156	105	189	211	199	3.20	1.044	1.091	4
Item 13	208	220	165	178	89	2.73	1.002	1.004	4
Item 14	90	50	187	208	325	3.70	0.850	0.723	4

Item 15	30	43	98	287	402	3.82	1.124	1.265	4
Item 16	108	116	168	199	269	3.07	1.118	1.250	4

Table 4 represents the analysis of the correlation of the variables with the engagement level. Tests like linear regression and multiple linear regression were performed in SPSS to analyze the correlation for the variables. Variables like gender, age, and institution play an essential role in the engagement level of the learners. The table shows that there was a significant relation in the engagement level based on gender (R^2 0.667<1; P 0.01<0.05) and Age (R^2 0.710<1; P 0.00<0.05). However, there was no significant relation in the engagement level with Institution (R^2 1.882>1; P 0.324>0.05)

Table 4 Linear Regression analysis of variables (DV: Learners Engagement)

Item	Category	Mean	SD	Correlation Coefficient(R^2)	Regression sig(p)
Gender	Male	4.76	0.872	0.667	0.010
	Female	5.23	0.786		
Age	18-19 Years	3.44	0.562	0.710	0.000
	20-21 Years	3.58	1.243		
	21-22 Years	2.97	0.529		
Institution	Vellore Private Engineering college	4.26	1.543	1.882	0.324
	Vellore Government Engineering college	3.32	0.725		
	Vellore Deemed to be University	2.40	0.298		

IV. DISCUSSION

Learner engagement plays a crucial role in learner attention, motivation and overall academic achievement. Learner engagement increases the self-regulation, attention and content comprehension of the learners. "Self-regulation relates to students' cognitive engagement. Similarly, there is a significant relationship between student self-regulation and the source of student's engagement"(Fajrin, 2021). Pellas (2014) confirm that "computer self-efficacy and metacognitive self- regulation in online courses were not only positively correlated with student's cognitive and emotional engagement factors, but were also negatively correlated with behavioral factors". Tamah and Triwidayati(2020) also confirm that a few factors, like teachers' knowledge and exposure and learners' exposure to technology and pedagogy, play an influential role in learners' engagement. In an online English language classroom, students' engagement is mainly influenced by their level of attention. Idris, Said, and Tan (2020) put forth that young students have a limited attention span and that their thoughts tend to wander after 10 to 20 minutes. The survey results show that students employ effective attentional strategies to focus on online language teaching regardless of their susceptibility to distraction while learning. The participants of the survey confirmed that they employ attentional methods and strategies like communicating with the instructor, switching off mobile phones, closing added browser windows, concentrating towards the content of online classes, engaging and focusing, completing worksheets and language activities, seeking advanced academic videos, and paying attention to those videos.

However, learners confirmed that the instructor's role is significant in the online classroom; hence instructors should use innovative activities to engage the learners during the online class. Lau and Lee (2020) reaffirmed the need for instructors to provide an interactive platform for young learners to maintain the student's attention span. Self-regulation and increased interest in the subject are the two fundamental characteristics of improving attention in an online class. Therefore, the teacher's position must evolve from being authoritarian to being collaborative and interesting. Teachers should participate in an interactive setting that promotes auditory and visual stimulation in a collaborative classroom. In the online class, the teacher's job does not just involve imparting knowledge; it also involves exposing the class to fresh, innovative teaching strategies. As a result, students tend to develop into innovators, designers, and authors who autonomously shape their own learning experiences and actively contribute to the classroom learning environment. This can be accomplished using visual and auditory cues, with the instructor engaging as a creative facilitator and increasing the pupils' learning through constructive criticism. Lowas and lin (2015) also confirm that learners' attention increases based on self-regulation. Borup et al. (2020) formulated the Academic Communities of Engagement (ACE) framework and concluded that the ACE framework increases the learner's engagement cognitively and behaviorally. Increased learning ability and attentiveness result from active engagement in all language activities. Gopinathat et al. (2022) also confirm that learners' active participation leads to learners' engagement and concludes that engagement affects by the factors like digital tools, social media, personal factors and motivation. Ashan (2021) also confirms that a practical framework combining factors like "active learning techniques, synchronous teaching, asynchronous teaching, and segmentation" have led to learners' engagement. Online learning offers greater flexibility and is more easily accessible. The importance of content comprehension in an online classroom relies on adequate content comprehension, which will help learners to learn languages more quickly.

The survey results conclude the following notions. Online students firmly trust that, in opposition to traditional offline education, the online teaching approach is highly dependent, reliable, accessible and straightforward. They put forth that online tools have easy accessibility. The participants' interest in learning the English language has increased due to the versatility, accessibility and flexibility of online learning environments like Learning Management Systems and applications. Online programs, webpages, and Learning Management Systems were utilized in online language instruction to facilitate learning and teaching. LMS like Blackboard, Moodle, Google Classroom, Schoology, Edmodo, and learn dash were employed in online English language teaching during covid scenarios. Learning management systems also has the features of conducting small progressive tests before

the examination which will significantly reduce the anxiety level of the learners for examinations. Multiple test patterns help the learners in scoring good marks and grades.

Video conferencing tools like Google Meet, Go to Meeting, Zoho Meeting, Zoom, Skype, Webex, and Microsoft teams have been extensively used for effective interaction in the English language classes during the covid situation. Employing Video conferencing tools during covid will improve the self-regulated learning and learner autonomy. Video conferencing tools has the ability to record the online classes and it will be saved in the software's' cloud. Online recording will help the learners to repeatedly hear the class and in clarifying the doubts. This will improve the attention level and engagement level of the learners. This was reconfirmed by Schacter et al(2015), video conferencing tools have significantly increased the engineering students attention by improving the attention, interest and reduce the wandering minds.

Websites like Duolingo, learning at the primary pond, Magoosh, Google earth, travel blogs, Fluentu, Class Central, Podcasts, Cambridge dictionaries, Oxford Dictionaries, Merriam webster, thesaurus, and Magic board was used in online classes to engage the students in the online classes. For adequate comprehension and learning outcomes, English language instructors often employ language activities like Online vocabulary games, speaking games, scrambled phrases, Keyword hunts, dialogue presentations, puzzles, Roleplay, personality description, dialogues in writing and auditory assessments, verbal inference, Emojis are posted in the chats of Learning Management system, analytical surveys, reading comic books, speech and pronunciation activities, reading and comprehension objective questions, and Group discussions, Reading literature novels, making comics characters in strips, video presentations, debates in groups, the reasoning of words, interpretation of the text, Adapting books into comic strips, writing the interpretation, paraphrasing, passage comprehension, listening exercises, and LSRW activities. When the learners effectively take part in the language-based activities and tasks, the learners' autonomy, self-regulated learning and content comprehension will be enhanced and improved This statement was confirmed by Pekrun et al. (2007), where he affirms that "learners may experience positive and constant engagement in classroom activities if they perceive they can perform appropriately in classroom tasks". As stated by Chaudhry et al. (2022), the survey also concludes that most participants gave feedback that they were satisfied with online learning and preferred the online mode of learning after the covid period.

Limitation

1. The present study is restricted to the Vellore district in Tamil Nadu and focuses only on ESL Engineering students.
2. The questionnaire was circulated to engineering learners pursuing bachelor's degrees from the Vellore district.
3. The study solely analyzes the teaching and learning of the English language during the epidemic and gathers information on various online language teaching techniques and tools.
4.

Future scope

1. Comprehensive research should be carried out in all the districts of Tamil Nadu and states of India to address the issues and challenges in online English language teaching
2. Studies could be carried out to discover the students' opinions about subjects like science, math, online learning, and higher education through online modes.
3.

V. CONCLUSION

Covid has shifted educational practices from offline to online for the past three years. There are benefits and drawbacks while attending English language education online. The questionnaire data and results confirm the flexibility, versatility, accessibility, and approachable nature of online education. Delivering a high-quality education should be the prime goal of language instructors. Both instructors and learners need to know about the latest technology, digital literacy, and high-speed web features to render effective content to the engineering students. Learners must develop self-regulated learning and self-interest to achieve language proficiency and academic achievement. This was also confirmed by Heo(2022) in his research. He states that self-regulation plays an important role in improving learners' engagement, motivation and self-efficacy. Pintrich (2000) puts forth that "self-regulated learning includes four phases in sequence: (1) forethought, planning, and activation, (2) monitoring, (3) control, and (4) reaction and reflection. The four phases explain the self-regulation process in terms of cognition, motivation, behaviour/execution, and context". According to students, online modes such as applications, websites, and language exercises used in online classrooms keep them interested and motivated to learn English. Learners' engagement towards language learning is highly significant during covid as the effectiveness relies on the learners' engagement level, teachers' awareness of technology and parents' support to offer formal education even during covid period. Learners affirmed that they have attentional problems, like distractions and electricity fluctuation. They affirm that they use effective attention strategies to stay focused during online classes. When the learner's engagement level is high, learners' content comprehension, attention and academic achievement were relatively high in the covid period. Students report that they are comfortable with online learning, and the online modes, applications and websites provide a variety of learning experiences for efficient language learning. While online education allows for student autonomy, efficient knowledge and comprehension primarily rely on a user's interests, self-control, and learning skills. It should focus on new educational transformation and be centered on research, observation, problem-solving, and experimentation. Engineering students, educators, educational authorities, and a larger community must be involved through cooperative and collaborative engagement, for effective rendering of education setting during online situation. Engineering education in covid period Should include hands-on, in-depth learning activities for the learners. Engineering education should emphasis on content, pedagogy, and a background of global culture.

Conflict of Interest:
None

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APPENDIX: QUESTIONNAIRE

English Language Activities and Learner Engagement During the New-Normal in India
I. Demographic Data

1. Email
2. Name
3. Designation
4. Name of College/ Institution
5. Age
6. Gender
7. What do you prefer for English language teaching? (Online teaching/offline teaching)
8. Did you miss the traditional offline teaching? (Yes/No)

II. Online Teaching and Engagement level

Items	1	2	3	4	5
Item 1: It is difficult to use virtual language learning tools like laptops, Mobile phones, tablets, iPad, LMS, video meeting apps, android learning applications?					
Item 2: How often do you get so focused on language activities given in your classroom?					
Item 3: My engagement level is high during the online classes.					
Item 4: My level of content comprehension during an online class is relatively high when compared to traditional classroom teaching.					
Item 5: I frequently turn on the laptop/system for attending online classes and for learning (e.g., writing/reading papers, reading, or seeking for information), but I always end up doing all irrelevant things like watching TV/YouTube, using Facebook other social media, reading/seeing magazines, or playing/visiting online games sites).					
Item 6: I often experience problems/issues in focusing/attention while attending online classes.					
Item 7: I often spend much of my learning time on the online entertainment apps other than online classes and learning.					

Item 8: I frequently click the weblinks of attentive/interesting advertisements, pictures, or weblogs without my consciousness while using my laptop to search for information for my language learning activity or during online classes.					
Item 9: If I encounter difficulties while doing language activities like using the Internet to learn and write the language, I will unconsciously open other programs, websites, or use my smartphone.					
Item 10: I always try different learning styles/strategies to aid in effective language learning and to stay focused on online language classes while attending the online classes.					

III. Learner language learning and language tools

Items	1	2	3	4	5
Item 11: I have acquired and developed my vocabulary skills through English language activities and by attending online classes.					
Item 12: I visit sites/blogs/wikis or use laptop/mobile applications which are relevant in English language activity during my online classes.					
Item 13: I can study and learn the English language on my own with the help of online applications and tools.					
Item 14: I have developed my language competency and grammar through language activities that were given in an online classroom					
Item 15: I will frequently use dictionaries and thesaurus to improve my online content comprehension and language learning.					
Item 16: I am attending online courses in MOOC, Coursera, SWAYAM, and NPTEL for effective learning.					