

Motivational Fluctuations in Online Learning: Do Differences in Learning Module Make a Difference?

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Abstract

Though research into the dynamic nature of motivation has gained momentum, there are still some aspects of the issue which are in need of further scrutiny. One such under-researched area is the effect of different learning modules on the direction and pattern of motivational changes, particularly in virtual learning environments. Informed by this gap, the current study explored how EFL learners' motivation fluctuates based on different learning modules. In so doing, the participants were selected from institute, high school and university contexts. Thus, a major objective of the study was probing the differences among the three contexts as regards motivational fluctuations caused by involvement with different lesson modules. Motometer was utilized as the main means of data collection. Also, in an attempt to triangulate the data collection procedure, retrospective thinking was employed following the collection of Motometer data. Based on the findings, for institute learners, the mid-time of their performance process was the peak motivation time. Furthermore, it was found that the learners experienced more motivation on the activities included in the oral module as opposed to reading activities. Conversely, high school students reached higher levels of motivation on the reading module as opposed to speaking and listening sections. Finally, although significant differences were identified between the institute and school settings concerning mean motivational values for oral modules, no significant difference was observed among the patterns of motivational fluctuations occurring for institute, high school and university students on reading module. The implications of the findings are discussed throughout the paper.

Keywords: Learning Module; Motivation; Motivational Fluctuations; Motometer; Virtual Learning

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INTRODUCTION

Motivation is an indispensable component of language learning, without which the learners will be unable to approach the prickly task of learning (e.g., Dörnyei & Ryan, 2015). It's also evident that learners with high degrees of intrinsic motivation can remove the learning obstacles and make up for the possible deficiencies in the learning path. Despite its seemingly straightforward nature, motivation has been viewed from different perspectives since its naissance. For instance, in its early days, it was regarded as a factor that was said to be at the mercy of the external forces. This behavioristic perspective of motivation later gave way to an alternative standpoint seeing the individuals as the agents who could make choices and decisions regarding the motivation process. Later developments in the field of motivation occurred in accordance with the advances made in psychological domains of constructivism and social constructivism (see Williams & Burden, 1997). With the preponderance of more individualistic and constructivist approaches to motivation, we came to regard motivation as an entity that can vary from one individual to another, and hence the contention holding that no two individuals are motivated in a similar manner received more credence. Today, we believe that motivation is not static and stable, and is rather fluctuating all the time (e.g., Csizér & Dörnyei, 2005; Dörnyei, 2009; Dörnyei & Ottó, 1998; Guo et al., 2020; Kruk, 2016; Lambert et al., 2017; Larsen-Freeman, 2015; Mohammadzadeh & Alavinia, 2021; Safdari, 2021; Rashidi et al., 2013; Rashvand Semiyari & Ghorbani, 2023; Ushioda, 2001).

Inspired mainly by Larsen-Freeman's (2015) seminal publication, we are now of the belief that like any other entity or state, motivation enjoys an unstable status, and instead of stability, it is prone to constant change (Azarmi et al., 2025; Dörnyei & Rayan, 2015; Larsen-Freeman, 2015; Safdari & Maftoon, 2016; Sehat et al., 2024; Waninge et al., 2014). Evidence for the claim that motivation is always in a state of flux can be gathered from the studies conducted by Pawlak (2012), Pawlak et al., (2014), Waninge et al.,

(2014), and Yanguas (2011), to mention but a few. Yanguas (2011), for instance, found changes in students' motivation throughout task performance, during which the context-sensitive and time-sensitive nature of motivation in students learning German was approved.

Though motivational fluctuations in language learning have been researched by several investigators in the context of face-to-face classes, very little research seems to have addressed the changes in motivation in online learning. This dearth of research on the issue is well-substantiated on account of the fact that the ubiquity of online learning is a fairly recent phenomenon which reached its heyday during Coronavirus Pandemic. Hartnett et al., (2011) are of the view that factors such as individual traits and classroom atmosphere play a part in shaping the learners' motivation in online learning experience. Moreover, Kyewski and Krämer (2018) call for further research to be done on motivational status in online courses to pinpoint the reasons underlying learners' lower levels of propensity for learning. Informed by this scarcity of studies in this domain, the researchers in the current study intended to probe the motivational fluctuations in Iranian EFL learners in virtual learning context. In so doing, the principal variable postulated to affect motivational fluctuations was the nature of the lesson modules with which the learners were engaged. In approaching the study objectives, the researchers also made comparisons between the three distinct contexts of school, institute and university learning.

LITERATURRE REVIEW

Motivation, according to Dörnyei and Skehan (2003, p. 614), "determines why people choose to do something, how long they are willing to sustain the activity, and how hard they are going to pursue it." Also, as Gardner and MacIntyre (1993, p. 3) contend, motivation is the "desire to achieve a goal, effort extended in this direction, and satisfaction with the task," while Ellis (1997, p. 12) describes motivation as "the effort learners put into learning an L2 as a result of their desire or need to learn it."

In recent years with the prevalence of new trends in motivational research, including the dynamic, process-oriented view of motivation, and complex nature of motivation which is said to be prone to constant changes, more investigators have delved into new research orientations probing the fluctuations occurring in individuals' motivation resulting from factors like time of the class, task involvement, and the like (Dörnyei, 2001, 2005; Mohammadi & Alavinia, 2021; Mohammadzadeh & Alavinia, 2021; Ortega, 2009; Pawlak, 2012; Pawlak et al., 2014; Sosin et al., 2024; Waninge et al., 2014; Widlund et al., 2024). The new directions in research on motivation, including motivational fluctuations and motivational currents are mainly inspired by the seminal work of Larsen-Freeman (2015) concerning complex dynamic systems theory (CDST), and as Hiver and Papi (2020, p. 125) put it, "contributions from complexity to the study of L2 motivation have been methodological, as an aid to designing research programs that prioritize adaptive and developmental processes." In what follows, some excerpts from research on motivational fluctuations are presented.

In a pioneering study, Pawlak (2012) addressed the temporal motivational changes in language acquisition throughout individual courses and a series of such sessions. The study looked at how 28 senior high school students' intents and interest changed over a four-week period. The analysis of the information gathered through questionnaires, observations, and semi-structured interviews with randomly chosen students showed that although the participants' motivations for learning English remained largely consistent, the intensity of that motivation varied from minute to minute. However, it should be highlighted that the study fell short of identifying any meaningful variations in the level of motivation from one English class to the next.

In like manner, Waninge et al., (2014) were interested in divulging the patterns of motivational changes in language learning process within the framework of dynamic systems theory. To conduct the study, they chose four students (two males and two females) to investigate the dynamic nature of motivation to conduct a thorough, individual-level microanalysis. The research, spanning over two weeks, was carried out using Motometer, a form

for recording classroom observations, and a motivation/attitude questionnaire. The findings disclosed that student motivation is subject to change, even over relatively short periods.

Likewise, Yaghoubinejad et al., (2016) examined the motivational changes over time in a sample of Iranian EFL learners. Implementing a three-phase semi-structured interview, they discovered significant motivational fluctuations in learners over time. According to what they reported, several elements, including the degree of enjoyment, internal motives, and learners' future prospects, contributed to the students' motivational changes. As they concluded, improving learners' future perceptions and raising the level of task motivation were identified as two key factors contributing to greater positive motivational fluctuations.

In another investigation, Kruk (2019) made an effort to look at how motivation changed in the second language learning context, and what circumstances affected it, along with other dimensions like readiness to speak, boredom, and anxiety. The study made use of two participants (one female and the other male) majoring in English language studies. The students were asked to self-rate their degree of motivation on a scale of 1 to 7 and to describe their motivational changes. In line with the findings, the overall motivational patterns of the two students were found to change from one session to the next and within a single visit. Additionally, it was indicated that the motivational changes for different sessions followed distinct patterns, and hence no consistency was observed as regards the overall pattern of fluctuations across the sessions that were analyzed.

In a later probe, Mohammadzadeh and Alavinia (2021) explored motivational fluctuations during task-supported language instruction. The study also aimed to distinguish the possible discrepancies between the learners and teachers' assessments of classroom motivation. To this aim, thirteen language school students were recruited to take part in the study. The instruments employed were lesson plans, Motometers, teacher observation sheets, and semi-structured focus group interviews, following the lead of Waninge et al., (2014). The results showed that motivation is changeable

depending on a variety of context-dependent variables, including instructional emphasis, learner dispositions on a given day, group dynamics, instructor motivation, and a number of contextual variables, including the day of the week and class schedule. Additionally, the data revealed discrepancies in the teachers' assessments of the students' motivation for each lesson.

In a similar vein, Mohammadi and Alavinia (2021) strove to examine task type effect on learners' motivational fluctuations. Their participants were some forty Iranian high school EFL learners, and the main tools utilized for gathering data were Motometers and interviews. As their findings indicated, task type played a significant role in shaping and directing motivational changes in students. It was also found that problem-solving task was the most captivating task, with the second most absorbing task being the one based on picture prompts. However, as regards the second focus of their study, no gender-related differences were identified apropos motivational fluctuations.

Moreover, Kruk (2022) aimed at pinpointing the factors influencing motivational dynamics and causing shifts in the degree of motivation. To conduct the study, he chose two advanced English language learners as the participants. In the research process, the two learners who took part in the study were instructed to improve their English by using the virtual environment. The analysis of the data through quantitative and qualitative methods disclosed a number of varied factors underlying the motivational changes and contributing to variations in motivation intensity.

In another scrutiny measuring the motivational changes throughout the learning process, Sosin et al. (2024) sought to gauge the oscillations occurring in learners' motivation on a weekly basis. To conduct the investigation, they selected a sample of 488 students in the German academic context. Their study also intended to pinpoint the possible go-togetherness between the learners' motivational fluctuations and their well-being status. As their findings demonstrated, close linkages were reported between the changes in the state of learners' motivation and their affective well-being.

Finally, in a more recent probe, Azarmi et al. (2025) set out to examine the changes in the degree of teacher motivation in virtual instructional

experience. In doing so, they also explored the contribution of teachers' emotional intelligence and teaching experience to changes in their motivational state. To implement their mixed-methods research, they recruited 55 EFL teachers from the language school context in Iran. Data collection in their study was carried out using Motometer, Bar-On's emotional quotient inventory, interview and narrative inquiry. According to their findings, emotional intelligence and seniority were both identified as important (yet statistically non-significant) factors in determining the degree of flux in the participants' motivation. Also, based on the teachers' perceptions voiced in their interview and narrative responses, an array of factors was singled out to tamper with teachers' motivation, including learner-related issues, teaching resources, instructional modules as well as internet connection issues.

Even though research on motivation as a dynamic entity has been ongoing for more than 20 years now, there is still a dire need for more thorough research into different unknown perspectives of motivational fluctuations (e.g., Pawlak et al., 2014). The body of literature available in this domain, part of which was reviewed in the foregoing section, has mostly focused on issues such as nature of motivational fluctuations in a single session, and across multiple sessions of instruction, as well as the factors influencing these changes in motivational states. The long-term fluctuations and motivational intensity have been among the other commonly investigated topics. However, it seems that changes in learners' motivational states following from engagement with different lesson modules as an important facet of research on motivational fluctuations have received meagre attention, and hence more scrutiny is required to uncover the enigmatic nature of motivational changes under the influence of involvement with different lesson modules. Another major lacuna that was identified in the literature, and hence addressed in the present study was the need for conducting comparative studies on learners' motivational changes with a focus on different levels of proficiency and diverse educational contexts. Informed by this dearth of

research in this domain, the researchers in the present study intended to bridge the gap by formulating the following research questions:

RQ1: How does Iranian institute EFL learners' motivation fluctuate based on lesson module?

RQ2: How does Iranian high school EFL learners' motivation fluctuate based on lesson module?

RQ3: How does Iranian university EFL learners' motivation fluctuate based on lesson module?

RQ4: Is there a significant difference among the patterns of motivational fluctuations occurring for institute, high school and university students based on lesson module?

METHOD

Design

This study employed a mixed-methods research design. Mixed-methods research combines quantitative and qualitative strands in a single or multi-phased study (Creswell & Plano Clark, 2011). In the present study, successive to quantitative data collection via motivation thermometers (Motometers), qualitative data were garnered in a retrospective manner based on the students' comments regarding their experienced motivational fluctuations. In fact, the qualitative data were used to clarify and explain the findings obtained from the quantitative phase.

Participants

The participants in this study were three groups of EFL learners studying at three different educational contexts, i.e. language school (institute), high school, and university. The learners were selected based on convenience sampling and availability. Due to the limitations prevailing through the time when the study was performed, mainly caused by Coronavirus Pandemic and the lockdown condition, and also owing to the inaccessibility of cooperating participants, only a total of 34 learners were selected from the three study

contexts: ten from language institutes, ten from universities, and 14 from schools. As no control was exercised for gender, both males and females participated in the study. The participants attended English language classes once a week at the school and university contexts, but twice a week in the institute context, with each class session lasting for 90 minutes in all three contexts. In terms of ethnicity and language background, the sample was quite diverse, with the students coming from Kurdish, Turkish or Persian backgrounds. Also, as regards the participants' familiarity with virtual learning, some variation existed based on the context, yet all of them had recently been pushed into this system of learning owing to the lock-down conditions.

Instruments

To gather data, following the lead of most similar studies in the realm of motivational fluctuations, the researchers opted for Motometers as the main means of data collection. However, to delve more deeply into the issue, the researchers also held a brief retrospective thinking session with the participants to help explicate some of the patterns of motivational changes that were revealed based on the findings. A brief account of these two means of data collection is provided in what follows.

Motometer

The first and the main research instrument used in the study was a Motometer, a device utilized in the previous studies on motivational changes, and particularly in the investigation performed by Waninge et al. (2014), to elicit the learners' self-ratings of their motivation on a scale ranging from 0 (the lowest motivation) to 100 (the highest motivation). The learners were required to determine the level of their motivation during the whole instructional session, and separately for each lesson module, at five-minute intervals. The instrument used was similar to Pawlak's (2012) motivational grid, which measured motivational levels on a scale ranging from 1 to 7; however, the researchers in the present study found Waninge et al.'s (2014)

Motometer more practical in gathering the intended data. To ensure the collection of more reliable data, and to minimize the interruptions in the process of performing research, the participants were briefed in advance regarding the research procedure, and were asked to specify the degree of their motivation at 5-minute time intervals upon receiving the instructors' reminder for doing so.

Retrospective Thinking

Another major phase of the study, which acted as the qualitative follow-up for the initial stage that relied on quantitative data collection via Motometers, was the retrospective thinking phase. This was mainly done by the researchers for a number of reasons, including the consolidation of the findings obtained through the use of Motometers, disambiguation of the vague points observed in the patterns of motivational changes, and augmentation of the dependability of the findings. In this process, the learners were demanded to think back on their self-ratings at different time intervals during the lesson, and recall what made them mark the motivational degrees and fluctuations in the way they did on the Motometer.

Data Collection Procedure

As stated earlier, the researchers in the current study embarked on pinpointing the pattern of learners' motivational fluctuations for different lesson modules covered in a single instructional session, and in so doing, a total of 34 Iranian institute, high school, and university EFL learners were used as the participants. To conduct the study, initially the participants were briefed on the research objectives, and informed consent was obtained from all the learners. They were further reassured that the findings would merely be used for the research purposes, and that they would not be revealed to any third parties outside the research context. After ensuring the confidentiality and anonymity conditions, the learners were sent the Motometers in an online fashion (as the participants were going through the virtual learning experience).

To cater for the collection of more dependable and valid data, clear instructions were provided for the learners as to the correct way of filling the Motometers and reporting the self-ratings of their motivation at 5-minute intervals. Then, a sample Motometer was filled for them, and after ensuring that they had grasped all the points, they were required to specify their level of motivation, upon the teacher's signal, by putting a mark on the Motometer from 0 to 100. These concerns were attended to in an attempt to safeguard the implementation of data collection in an unobtrusive manner, and to let the learners proceed with the normal process of instruction and task completion. At the end of the instructional session, the participants were required to send the filled Motometers to the first two researchers in the study, who were in charge of data collection in the classes they were instructing. After screening the gathered Motometers and controlling for the accuracy of the procedure, the first two researchers arranged a retrospective thinking session with the participants, during which the said researchers tried to tap into the reasons inspiring the learners to fill the Motometers in the way they did, and in so doing, the learners completed Motometers were used as a sort of prompt helping them to remember what they had reported.

Data Analysis

As mentioned before, the study was done in two phases, with the first phase being quantitative in nature and the second one following a qualitative procedure. To analyze the data, for research questions one to three, the descriptive statistics were reported using SPSS (version 22). However, the analysis of data for research question four which explored the difference among the patterns of motivational fluctuations occurring for institute, high school and university students based on lesson module, entailed the use of independent samples t-test and one-way ANOVA statistics. As regards the quantitative analysis, a number of extracts from the learners' responses in the retrospective thinking phase are listed.

Results

Findings Obtained for Research Question One

The first research question of the study investigated how Iranian institute EFL learners' motivation fluctuates based on lesson module. Table 1 represents the mean motivational fluctuations experienced by institute learners on the speaking module. It is worth noting that the speaking module lasted for 25 minutes, and the students were supposed to reveal the amount of their motivation on the Motometer every five minutes.

Table 1. The Mean Scores Obtained for Motivational Fluctuations among Institute EFL Learners on Speaking Module

	N	Minimum	Maximum	Mean	Std. Deviation
Ins. Sp. (Minute 5)	10	60.00	98.00	87.60	12.71
Ins. Sp. (Minute 10)	10	75.00	100.00	86.70	8.12
Ins. Sp. (Minute 15)	10	81.00	100.00	94.20	6.32
Ins. Sp. (Minute 20)	10	70.00	100.00	89.80	9.93
Ins. Sp. (Minute 25)	10	80.00	100.00	92.20	6.19
Valid N (listwise)	10				

Ins. Sp. = Institute Speaking Module

As is clear from the table, the highest mean belongs to the middle time of speaking module, and the second peak occurs at its end. It can be interpreted that the greatest amount of engagement has taken place in the middle of the speaking activity, and the learners have reached the topmost level of satisfaction at this point. Table 2 illustrates the mean motivational fluctuations experienced by institute learners on the listening module.

Table 2. The Mean Scores Obtained for Motivational Fluctuations among Institute EFL Learners on Listening Module

	N	Minimum	Maximum	Mean	Std. Deviation
Lis. (Minute 5)	10	60.00	100.00	83.10	13.37
Lis. (Minute 10)	10	75.00	100.00	92.90	7.40
Lis. (Minute 15)	10	77.00	100.00	93.20	7.28
Lis. (Minute 20)	10	70.00	100.00	92.60	9.73
Lis. (Minute 25)	10	76.00	100.00	90.70	7.91
Valid N (listwise)	10				

Ins. Lis. = Institute Listening Module

As is seen in the table, very little fluctuation exists in the mean values of motivation experienced by the learners. It must be noted that the lowest mean belongs to the beginning time of listening module, where the students haven't still been aroused by the activity. However, during the remaining time, their motivation moves to a higher level and remains constant up to the end of the listening module. Also, Table 3 illustrates the mean motivational fluctuations experienced by institute learners on the reading module.

Table 3. The Mean Scores Obtained for Motivational Fluctuations among Institute EFL Learners on Reading Module

	N	Minimum	Maximum	Mean	Std. Deviation
Ins. Rd. (Minute 5)	10	60.00	97.00	83.90	11.59
Ins. Rd. (Minute 10)	10	50.00	97.00	87.30	13.77
Ins. Rd. (Minute 15)	10	50.00	98.00	88.20	14.42
Ins. Rd. (Minute 20)	10	40.00	99.00	84.40	17.61
Ins. Rd. (Minute 25)	10	70.00	99.00	87.70	9.01
Valid N (listwise)	10				

Ins. Rd. = Institute Reading Module

As depicted in Table 3, the motivational levels are comparatively lower on the entire reading module as opposed to speaking and listening. Though the changes in the mean level of motivation are minimal and hence negligible across reading module, it can be seen that in the middle of the activity, the students have experienced a relatively higher level of motivation. Two things can be concluded from the data presented in this section. First, the middle time for the performance has been the time at which the learners have experienced the highest level of motivation. And second, the learners have experienced more motivation on the speaking and listening modules (the oral skills) than the reading. The data gathered from the participants in the retrospective thinking phase are supportive of particularly the second finding in this quantitative phase as the learners highlighted the more interesting nature of oral modules than the reading section. The following two extracts are indicative of this issue.

Extract 1

I feel more joy when I'm working on the speaking and listening tasks. Readings are good, but sometimes they get boring.

Extract 2

Readings are not as involving as listening and speaking sections. I usually prefer to have more practice with the speaking.

Findings Obtained for Research Question Two

The second research question of the study explored how Iranian high school EFL learners' motivation fluctuates based on lesson module. Table 4 displays the mean motivational fluctuations experienced by high school learners during the speaking module.

Table 4. The Mean Scores Obtained for Motivational Fluctuations among High School EFL Learners on Speaking Module

	N	Minimum	Maximum	Mean	Std. Deviation
Sch. Sp. (Minute 5)	14	60.00	100.00	92.85	11.55
Sch. Sp. (Minute 10)	14	25.00	100.00	77.07	21.01
Sch. Sp. (Minute 15)	14	30.00	100.00	81.07	24.27
Sch. Sp. (Minute 20)	14	40.00	100.00	81.42	21.34
Sch. Sp. (Minute 25)	14	40.00	100.00	81.42	21.34
Valid N (listwise)	10				

Sch. Sp. = School Speaking Module

As is evident from the table, the highest mean has been experienced by the students at the outset of the activity, while after a few minutes and around minute 10, this motivation has gone through a sharp decline, possibly because the activity hasn't been so involving, or the teacher has failed to perform it in a proper way to motivate the students. This low level of motivation, as it can be seen, persists up to the end of the activity, though it slightly increases at around minute 15 and continues to stay at approximately the same level. With regard to the motivational fluctuations during the listening module, the readers can refer to Table 5 below.

Table 5. The Mean Scores Obtained for Motivational Fluctuations among High School EFL Learners on Listening Module

	N	Minimum	Maximum	Mean	Std. Deviation
Sch. Lis. (Minute 5)	14	20.00	100.00	81.64	25.73
Sch. Lis. (Minute 10)	14	10.00	100.00	73.21	27.07
Sch. Lis. (Minute 15)	14	30.00	100.00	71.07	21.31
Sch. Lis. (Minute 20)	14	20.00	100.00	81.07	22.28
Sch. Lis. (Minute 25)	14	45.00	100.00	82.50	17.29
Valid N (listwise)	10				

Sch. Lis. = School Listening Module

As can be inferred from the table data, like the speaking module, the students have again experienced much lower levels of motivation during this module in comparison to institute learners. This can be again attributed to the low level of engagement this lesson module has engendered or the teachers' inefficacy in turning the listening module into a more motivating and involving experience for the students. Furthermore, it must be noted that the highest levels of engagement and hence motivation are related to the initial and final parts of the lesson. Table 6 reports the mean motivational values obtained for the reading module.

Table 6. The Mean Scores Obtained for Motivational Fluctuations among High School EFL Learners on Reading Module

	N	Minimum	Maximum	Mean	Std. Deviation
Sch. Rd. (Minute 5)	14	60.00	100.00	85.71	16.15
Sch. Rd. (Minute 10)	14	20.00	100.00	77.50	23.75
Sch. Rd. (Minute 15)	14	50.00	100.00	78.07	18.59
Sch. Rd. (Minute 20)	14	50.00	100.00	85.42	15.57
Sch. Rd. (Minute 25)	14	70.00	100.00	92.85	10.50
Valid N (listwise)	10				

Sch. Rd. = School Reading Module

Interestingly, according to the table above, the reading module has generated comparatively higher levels of motivation among the students as opposed to speaking and listening modules. Though the motivation is at a relatively high level at the beginning of the lesson, it declines during the following minutes, and finally returns to a peak at the end of the activity. The higher motivation levels experienced by the high school students on the reading module compared to the speaking and listening modules might be due to the fact that

high school students feel more at ease with the reading module which is more manageable for them. Furthermore, based on the current researchers' experience of dealing with Prospect and Vision series at the high schools (particularly the first researcher who is a senior high school teacher), it seems that the speaking modules at the high school are not so captivating for the students in comparison to the ones in institute books which are more genuine and authentic. Evidence for this claim can be gathered from the comments the students have communicated in the retrospective thinking session, two examples of which are provided below.

Extract 3

Reading is easier for me. I think listening and speaking are harder and I don't like them a lot.

Extract 4

The listenings and speakings in my book are not so interesting. I also go to institute classes and they are more enjoyable for me.

Some of the participants referred to the dreary nature of the speaking module (the dialog) used in that session, and realized it as the major reason underlying their lack of motivation. The following extract can help divulge the issue in a more lucid manner.

Extract 5

The dialog we studied was about personality which was not interesting enough for me.

Findings Obtained for Research Question Three

The third research question of the study examined how Iranian university EFL learners' motivation fluctuates based on module type. Unfortunately, due to the main focus of the general English courses in Iranian universities which is merely on reading module, more specifically reading and translating activities, the researchers couldn't gather evidence for the motivational fluctuations across other modules. Table 7 illustrates the mean motivational values obtained for university students as regards the reading module.

Table 7. The Mean Scores Obtained for Motivational Fluctuations among University EFL Learners on Reading Module

	N	Minimum	Maximum	Mean	Std. Deviation
Uni. Rd. (Minute 5)	10	75.00	100.00	91.50	10.01
Uni. Rd. (Minute 10)	10	90.00	100.00	95.50	4.97
Uni. Rd. (Minute 15)	10	70.00	99.00	88.20	10.70
Uni. Rd. (Minute 20)	10	60.00	100.00	78.40	16.56
Uni. Rd. (Minute 25)	10	40.00	100.00	87.50	18.74
Valid N (listwise)	10				

Uni. Rd. = University Reading Module

As is evident from the table above, the highest level of mean motivation has been reached at the end of minute 10, and the lowest level has been experienced at around minute 20. Though the learners' motivational levels have fluctuated recurrently, it seems that the learners have been motivated at the beginning and have gradually lost their motivation along the way. The observed decline in the learners' motivational level toward the end of the activity can be accounted for on different grounds. However, as most of the students later reported in the retrospective thinking session, the decreased levels of motivation in reading were induced by the difficulty of the reading text. In this regard, one of the students expressed the reason for her low motivation on the reading module in the following manner:

Extract 6

I lost my motivation because the reading was too hard for me, and I had problem understanding it.

Findings Obtained for Research Question Four

The last research question of the study explored the difference among the patterns of motivational fluctuations occurring for institute, high school and university students based on module type. At the outset, to ensure the normality of distribution of scores, Kolmogorov-Smirnov and Shapiro-Wilk tests were run on the mean motivational values obtained for the three modules of speaking, listening and reading, the results of which are depicted in Table 8.

Table 8. Test of Normality for the Mean Motivational Levels of Students for the Three Modules

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Speaking	.20	10	.200*	.92	10	.43
Listening	.19	10	.200*	.89	10	.17
Reading	.14	15	.200*	.94	15	.41

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

As the results of the normality tests, in line with what is listed in the table above, pointed toward the normal distribution of data, for the comparison of mean motivational levels of institute and school students on speaking module, independent samples t-test was run, the results of which are shown in Tables 9 and 10.

Table 9. Group Statistics Obtained for the Mean Motivational Values of Students for Speaking Module

Group	N	Mean	Std. Deviation	Std. Error Mean
Speaking	Institute	5	90.10	3.12
	School	5	82.76	5.92

As is indicated in Table 9, the mean obtained for institute learners ($M = 90.10$) is higher than the one attained for high school students ($M = 82.76$). Further evidence for this difference can be gathered through consulting the result of independent samples t-test (see Table 10).

Table 10. Independent Samples t-test Results for the Mean Motivational Values of Students on Speaking Module

	Levene's Test for Equality of Variances	t-test for Equality of Means						95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Speaking	Equal variances assumed	.71	.42	2.44	8	.040	7.33	2.99	.42	14.24
	Equal variances not assumed			2.44	6.06	.050	7.33	2.99	.01	14.65

Based on the result of independent samples t-test reported in the table above, the observed *Sig.* value for Levene's test is larger than .05. Hence, the first row in the table, i.e. 'equal variance assumed' is to be consulted. As can be witnessed, the observed *p*-value (*p* = .04) is lower than the alpha level set at .05, and hence a statistically significant difference is observed between the mean motivational values of institute and school learners on speaking module. Also, to investigate the differences between the motivational levels of institute learners and high school students on listening module, independent samples t-test was run for a second time, the results of which are shown in Tables 11 and 12.

Table 11. Group Statistics Obtained for the Mean Motivational Values of Students for Listening Module

Group		N	Mean	Std. Deviation	Std. Error Mean
Listening	Institute	5	90.50	4.25	1.90
	School	5	77.89	5.33	2.38

Table 11 above shows that the obtained means for institute learners and high school students are different, with the institute learners having a higher degree of mean motivation on listening module ($M = 90.50$). However, to see whether this difference is statistically significant, the results of independent samples t-test in Table 12 are to be consulted.

Table 12. Independent Samples t-test Results for the Mean Motivational Values of Students on Listening Module

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Listening	Equal variances assumed	1.49	.25	4.13	8	.003	12.60	3.05	5.56	19.63	
	Equal variances not assumed			4.13	7.62	.004	12.60	3.05	5.50	19.69	

As the data in the table above demonstrate, the difference between the institute and high school learners' mean motivational levels is statistically significant ($p = .003 < .05$). Finally, to compare the mean motivational levels on reading module for the three groups (institute learners, high school and university students), one-way ANOVA was used. Table 13 indicates the descriptive statistics, and Table 14 shows the results of one-way ANOVA.

Table 13. Descriptive Statistics for the Mean Motivational Levels of Students for Reading Module

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Institute	5	86.30	1.99	.89	83.82	88.77	83.90	88.20
School	5	83.91	6.33	2.83	76.04	91.77	77.50	92.85
University	5	88.22	6.33	2.83	80.34	96.09	78.40	95.50
Total	15	86.14	5.23	1.35	83.24	89.04	77.50	95.50

As is seen in the table above, though the mean value obtained for the university students is the highest, followed by institute learners and then high school students, the differences are not that large. However, to gather more evidence for the significance of this difference, use was made of one-way ANOVA, the results of which are depicted in Table 14 below.

Table 14. One-way ANOVA Results for the Mean Motivational Values of Students on Reading Module

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	46.62	2	23.31	.82	.46
Within Groups	337.28	12	28.10		
Total	383.91	14			

Based on Table 14, it can be claimed that as regards the reading module, the differences among the three groups of learners are not statistically significant, and hence based on the overall data reported in this section, it can be concluded that though differences exist between the groups concerning mean motivational values obtained for speaking and listening modules, no significant difference can be found among the patterns of motivational

fluctuations occurring for institute, high school and university students on the reading module.

DISCUSSION

The first research question of the study investigated how Iranian institute EFL learners' motivation fluctuated based on module type. As the finding for this research question indicated, the learners experienced the highest degree of motivation in the middle of performance time. Also, in line with the finding, the learners revealed a greater amount of motivation on the speaking and listening modules (the oral skills) than the reading module. The fact that lesson module can make a big difference in motivating learners is well-substantiated by a number of previous researchers, including Azarmi et al., (2025), Mohammadi and Alavinia (2021) and Mohammadzadeh and Alavinia (2021). Also, as Kormos and Prefontaine (2017) contend, a key factor determining efficient performance on activities is the perceived success in task completion. Nevertheless, the current finding showing that the reading module sparked less motivation than the speaking and listening modules can be in contrast to the one reported by Yoo and Huang (2013), who claimed that reading English texts online has a positive effect on motivation.

The second research question explored how Iranian high school EFL learners' motivation fluctuated in accordance with lesson module. Based on the finding obtained for this research question, it was revealed that unlike the institute learners for whom the oral modules were more motivating, in the high school context, the reading module generated higher levels of motivation as opposed to speaking and listening modules. Regarding the failure of the speaking module to draw the attention of the students and create a state of flow in them, reference can be made to the reasons they reported in the retrospective thinking session, in which as mentioned earlier, they had highlighted the inefficacy of the dialog topic to keep them interested. In other words, since they were not engaged with the activity and couldn't relate with it well, their motivation in this module was not so high. This finding is in line with Çebi and Güyer (2020), who reported a positive relationship between

students' motivation and their level of engagement with the course material. It is also in keeping with Yoo and Huang's (2013) finding showing that online reading can prove to be a motivating activity for learners.

Also, drawing on the first researcher's own experience of teaching for almost two decades in different Iranian high schools, it can be averred that English classes take reading skill into account more seriously than the oral proficiency skills, perhaps due to its great influence on success in the university entrance exam (known as Konkur). Thus, the unfamiliarity of the speaking and listening modules and hence their intractability might be another principal reason for the learners' distaste for the oral modules. This finding resonates with the findings of Kormos and Préfontaine (2017), who declared that activities that are conceptually demanding, and hence difficult are likely to provoke negative emotional states. Moreover, as regards the challenging nature of listening module and the lower motivation of the students to perform on it, the current finding lends support to the claim made by Mohammadzadeh and Alavinia (2021) who maintained that listening is the least favorable activity due to students' difficulty comprehending it.

The third research question examined how Iranian university EFL learners' motivation fluctuated based on module type. As mentioned earlier, owing to the chief focus of general English courses in Iranian universities, which is mostly on reading and translation, the researchers couldn't gather evidence for the motivational fluctuations across other modules. According to the findings obtained regarding the fluctuations of motivation during the reading module, it was concluded that learners' motivational levels fluctuated recurrently, so that they were more motivated at the beginning and gradually lost their motivation toward the end of the activity. As uttered previously, this decline in the students' motivational level was ascribed to the difficulty of the reading text, according to the students' report in the retrospective thinking session. This finding is consistent with that of Pawlak (2012) who maintained that the magnitude and nature of motivation are subject to change over time. The finding is also in compliance with what Neugebauer and Fujimoto (2018) contended. Taking a social-constructivist approach, they highlighted the role

of task features and context on the ups and downs in learners' reading motivation.

The fourth and the last research question explored the difference among the patterns of motivational fluctuations occurring for institute, high school, and university students based on lesson modules. As the finding for this research question demonstrated, though differences prevailed between institute and school participants concerning mean motivational values on oral modules, no significant difference was detected among the patterns of motivational fluctuations occurring for institute, high school and university students as regards reading module. This result is in partial keeping with Mohammadzadeh and Alavinia (2021), who found that task-supported language instruction brought about significant motivational fluctuations. However, a few key distinctions between their work and the present research should be noted. First of all, the two studies had different foci: their study focused on motivational fluctuations within a single instruction session as well as across consecutive sessions, while the current study only focused on lesson module as the primary determining factor in motivational fluctuations at the institute, high school and university learning contexts. Additionally, the participants employed in the current study were from both genders, whereas the sample used in their study was composed of exclusively female learners. Furthermore, as regards instrumentation, they employed interviews beside Motometers, whereas the data for this study were collected using Motometer and retrospective thinking procedure. The finding also provides marginal support for what Mohammadi and Alavinia (2021) reported, indicating that task type was a significant factor in determining changes in motivation. However, their study was focused on the effect of varied task types on motivational flux, whereas the current study opted for the impact of disparate lesson modules on motivational changes.

CONCLUSION

The study reported in this paper investigated the dynamic nature of motivation in foreign language learning, and due to its unique focus, it might

be regarded as one of the first attempts to explore the changes in motivational intensity in three different learning contexts, i.e. institute, high school, and university. The findings mainly revealed significant differences between the institute and school learners' mean motivational levels on the oral modules, whereas the patterns of motivational fluctuations occurring for institute, high school and university students on reading module didn't reveal a significant amount of difference. At the same time, students' comments voiced in the retrospective thinking session helped unveil some of the factors affecting changes in students' motivational levels in the aforesaid contexts, including the degree of involvement, and the interesting nature of discussion topics.

The findings of the current study are thought to offer some fruitful implications for university professors, as well as school and institute teachers. Among the most conspicuous implications, mention can be made of raising teachers' awareness regarding the efficacy of the selected activities, tasks and assignments in different lesson modules, and the variable degrees of involvement and hence motivation they might spark, and the implementation of needs analysis projects to inform the instructors of the learners' most preferred topics and themes. Hence, it is thought, informed by the findings of the current research, the instructors will hopefully act more responsibly in planning the course and preparing the tasks and activities which are more absorbing for the students at different levels of proficiency and in different learning contexts. In other words, to provide for the best level of motivation possible, educationally speaking, relevant themes and intriguing tasks and activities from the students' personal experiences and preferences might be included in different lesson modules. In this regard, Ellis (2003) states that themes with a "here-and-now" focus may generate a more favorable reaction from pupils. Instructors must also be aware of how the nature of the work may impact students' motivation and feelings. Furthermore, students feel extremely motivated and confident when they have the language and topic knowledge necessary to perform well on the assigned activities, tasks and assignments.

It must also be noted that teachers and students at the context of institutes, schools and universities might reap distinct benefits from the findings of the current study. While different lesson modules at the institutes have an acceptable degree of variety and hence a satisfactory level of attraction, further attempts on the part of teachers to provide the learners with more enticing extracurricular materials relevant to their needs and interests can help raise their motivation. The need for inclusion of more intriguing content is felt even more with regard to the locally designed high school series (prospect and vision), particularly as regards the addition of more authentic listening and speaking modules. Moreover, based on the findings of the current research, university professors might be encouraged to make the content of their general English classes more appealing by adding captivating listening, speaking, and writing parts to make the students more motivated in learning English.

Although the study provided some useful insights into the patterns of motivational fluctuations in the three studied contexts, like all other investigations it was not void of weaknesses and limitations. First and foremost, due to the online nature of classes at the time the study was conducted, access to more participants was not possible for the researchers, which led to having a lower number of participants than initially anticipated. Second, though attempts were made on the part of researchers to include three contexts of English language learning to pinpoint their motivational fluctuations and their self-ratings of motivation through Motometers, the data for university students could only be gathered regarding the reading module, which prevented the researchers from making sound comparisons among the three groups as regards the listening and speaking modules. Third, even though the comments were collected at precise five-minute intervals in an unobtrusive manner and without undue interruption, the fact that they were required to provide self-ratings of their motivation while focusing on the lesson could have possibly made it challenging for the students to give their undivided attention to both the materials being learned and the provision of self-reported motivational changes.

Fourth, even though the students had been taught how to complete the Motometers to reveal motivational fluctuations, the mere application of Motometers might not have been sufficient in gathering the reliable data, and the use of other instruments could have helped come up with more robust and reliable data. Fifth, because two of the current researchers (the first and the second one) were the instructors of two of the classes, the researchers' presence in the class environment may have led to Hawthorn effect, and hence adversely impacted the obtained results. Sixth, as the study was done during the pandemic and in the virtual learning environment, face-to-face contact with the participants was not possible, a point which might have exerted a negative influence on the obtained findings. Lastly, interpretations had to rely mostly on the researchers' conjectures about the direction of the motivational changes in the absence of more rigorous evidence from the literature, and hence the conclusions made were rather based on the learners' self-ratings of their motivation, and their comments.

Similar research in other contexts is needed to dive deeper into the elements influencing learners' motivation to corroborate the findings. Future researchers, for instance, are advised to make use of a variety of data collection tools in addition to the ones employed in the current study to come up with more reliable findings. Also, the current study might be replicated by the future researchers in the on-site physical classes in an attempt to corroborate or complement the findings. In conducting future research in this realm, the researchers are also recommended to investigate the possible effect of other factors like proficiency level, gender, age group, personality traits, and the like, as regards the learners' ensuing motivational changes. Moreover, the use of research assistants can be a good measure to lessen the potential effect of researcher presence and what is known as double-blind (e.g., Mackey & Gass, 2005). Additionally, since the researchers in the current study couldn't afford an equal number of participants in all three groups, it is thought that the inclusion of more balanced groups of participants can help reach better conclusions and generalizations about the findings. As a final recommendation, further explorations can be conducted in a longitudinal

manner to gauge the learners' motivational changes in the long run. After all, it must be noted that though probe into motivational fluctuations has been around for more than two decades now, doing research in this domain still resembles sailing within uncharted waters, and there are so many perspectives of the issue that are in need of further scrutiny and disambiguation.

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