

Associations between Iranian University-Level EFL Learners' Perceptions of Their Language Learning Environment and Their Motivation and Self-regulation

Nikoo Farhadian*, Azizeh Chalak

English Department, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

*E-mail: nikoo.farhadian@gmail.com

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Abstract

The present study attempted to examine Iranian university level EFL students' perceptions of their language learning environment regarding two fundamental components of language learning engagement and achievement; that is, motivation and self-regulation. The study involved the administration of modified versions of the Engagement in English Language Learning and Self-Regulation (EELLS) questionnaire to assess participants' motivation and self-regulation in English language learning, and the School, Physical and Campus Environment Survey (SPACES) questionnaire to assess students' perceptions of their physical language learning environment. Statistical measures of variance, Eigenvalue, alpha Cronbach value, and component correlation matrix ensured the reliability and validity of the two questionnaires. Furthermore, the results of simple and multiple correlation analyses as well as standardized regression analysis revealed a strong and significant association between students' perceptions of their language learning environment and their motivation and self-regulation. The findings suggest that EFL stakeholders should carefully examine language learning environments that they are creating in terms of architectural, spatial, visual, ambient, and aesthetics features.

Keywords: Environment, Language Learning, Motivation, Perception, Self-regulation

Introduction

Today, the study of learning environments has a crucial role to play in teaching, teacher training, professional development, and the evaluation of innovations in educational space. Many argue that the study of learning environments is an important field of inquiry in its own right—the description of a valuable psychosocial component of students' experience. In his earliest work on human environments, Moos (1974, 1979) suggested that interest in the physical and social aspects of planning human environmental systems, such as towns, workplaces or public institutions, was steadily increasing in response to the technological advances that often instigate the large-scale changes and adaptations that are required in today's society. He argued that those changes require a socio- environmental model to conceptualize, assess and address our evolving perceptions of space (Moos, 1979). A similar line of inquiry then developed around the study of educational environments. Adapting Moos' ideas to educational settings, Walberg (1991) claimed that the evaluation of teaching is based on structural and behavioral theories that require perceptual measures of what he termed *the feel of the class*. Walberg (1991) further noted that the analysis of behavioral complexes with educational perceptions eventually could begin to characterize important aspects of what he termed psychosocial and material learning environments.

Over the last 40 years, learning environment research has grown considerably and now encompasses a diverse range of approaches that have been developed, tested and validated in a variety of educational settings and in a variety of different countries (Fraser, 2012, 2014). During

this time, research on learning environments has “provided convincing evidence that the quality of the classroom environment in schools is a significant determinant of student learning” (Dorman, 2001, p. 2). The American environmentalist Orr (1999, p. 212) has noted that “the curriculum embedded in any building instructs as fully and as powerfully as any course taught in it”.

Literature Review

The built environment of educational settings affects how students move through space, how they gather with peers, and how they feel in a space. School classrooms and buildings have the potential to move beyond supporting daily needs; they can enhance educational pedagogy in critical ways. In addition, school buildings have the ability to support and foster occupants’ imaginations as well as occupants’ connection to themselves, peers, to the larger community and to the immediate natural environment (Alexander, Ishikawa & Silverstein, 1977; Uptis, 2004). The built environment thereby enhances or detracts from our perception of the natural surroundings or local contexts in the same conceptual ways as the psychosocial learning environment that we experience.

In the earliest research in this area, Astin (1975), Pascarella and Terenzini (1980, 1991) and Tinto (1987) addressed research on student behavior within post-secondary campuses to describe what factors supported or impeded student success. As illustrated by Tinto (1987), the campus environment had impact on the social and academic engagement of students and possibly led to increased rates of completion. Strange and Banning (2001) examined the influence of design, arrangement and orientation of space within campus environments. Space, as they describe it, is an informal messenger to students, staff, faculty and visitors to a campus. They examined space through several lenses including planning, utilization, proxemics and wayfinding. Their findings suggest that space persuades behavior symbolically and silently. This relationship between a learning space and students is central to creating a cohesive learning environment.

Oblinger’s (2006) work also contributed to the dialogue on environmental relationships. Oblinger compiled a series of case studies from the US and Canada that revealed parallels in the factors that create positive learning spaces within educational settings and described the assessment and evaluation processes that were used to determine the value of these. Temple (2007) also identified that the planning and design of educational space appear to be stimulated by new approaches or ideas related to learning and teaching and to recent technological advances.

Although a considerable body of research has shown that there are strong and consistent associations between the achievement of the students and characteristics of the learning environment (e.g., Aldridge, Laugksch & Fraser, 2006; Wolf & Fraser, 2008), far too little attention has been paid to the influence of environmental features on non-cognitive factors that can affect language achievement such as motivation and self-regulation.

One of the greatest challenges that teachers face is stimulating students’ motivation to learn (Theobald, 2006). Motivation is a key dimension of attitudes (Tapia & Marsh, 2004) that instigates and focuses goal-oriented behavior (Schunk, 2004). Zimmerman (2002) indicated that three components of motivation have consistently been associated with students’ adaptive motivational beliefs— learning goal orientation, task value and self-efficacy—and that each is integral to successful engagement in self-regulated learning. The ability of students to self-regulate their learning has been identified as a central construct that influences students’ engagement in learning and their achievement in school (Boekaerts & Cascallar, 2006). According to Pintrich (2000), both adaptive motivational beliefs and adaptive self-regulated learning foster students’ engagement in classroom activities.

Self-efficacy is a construct similar to confidence and usually refers to a person’s judgement about his/her capability to perform a task at a specific level of performance. It is the ability of an

individual to control his or her conduct to achieve a set goal (Schunk & Zimmerman, 2008). Pintrich (2000, p. 453), describes self-regulated learning as the “active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment”. Zimmerman (2008) emphasizes that self-regulated learning involves the degree to which students metacognitively, motivationally and behaviorally participate in the learning process.

The past two decades have established motivation and self-regulation in language learning as key determinant of language learners’ success (Dornyei & Ushioda, 2009). It has also been indicated that the students’ successful engagement in learning and their ultimate mastery of the language they intend to learn is dependent upon the level of motivation and self-regulation in the learning process (Dornyei, 2007, 2008). Despite the correlation and influence that the environment on the one hand and motivation and self-regulation on the other hand can have on language achievement, far too little attention has been paid to establishing a link between these two important aspects. Thus, further research are required to delve into how students perceive their educational spaces and how their motivation and self-regulation are being influenced by the built environment around them.

Learners’ perceptions of the learning environment have always been the concern of policy makers and practitioners in diverse realms of education. Many researchers in their studies have supported those educational stakeholders’ sensitivity because learners’ perception toward the learning environment influences the way they actually learn (Anderson, Hamilton, & Hattie, 2004; Fraser, 1998; Fraser, & Walberg, 2005; Freiberg, 1998; Baeten, Dochy & Struyven, 2013).

Nevertheless, although one can find tremendous findings about learners’ perceptions in relation to the various elements of the learning environment (Chua, Wong & Chen, 2011; John , Frances & Hin-wah, 2003; Zedan, 2010), there exists scarce research on Iranian learners’ perceptions on the learning environment in the literature. In particular, there is paucity of research on this subject in the field of foreign language learning.

As there are no studies to date that have explored the nature of the classroom environment in the Iranian literature, this study made the first attempt to examine Iranian university level EFL students’ perceptions of their language learning environments and how these relate to two fundamental components of learning engagement; that is, motivation and self-regulation. The following research question guided the study:

RQ. To what extent do the students’ perceptions of their language learning environment influence their motivation and self-regulation in language learning?

Methodology

Participants

The sample for the present study was drawn from different universities in Isfahan, a metropolitan city in Iran. In total, 554 students from 7 different universities were involved. They were male and female adult EFL students majoring in TEFL, translation studies, and English literature. Their age ranged between 18 and 27 and shared Persian as their mother tongue.

The original pool of the study consisted of 735 students but complete and usable responses were obtained from 554 students which shaped the participants of the study. The participants completed and returned the surveys to the researchers and these survey results were then collated and recorded for the analysis.

Instruments

In order to investigate the students’ perceptions of their language learning environment, the School, Physical and Campus Environment Survey (SPACES) was adapted from Zandvliet and

Broekhuizen (2017). The survey aims to measure the structural, architectural, and ambient features of a learning environment that are often overlooked when assessing learning spaces. This survey measures five physical constructs important to learners' perceptions: the spatial environment, scale and aesthetics, ambient factors, architectural elements, and the visual environment. Spatial environment addresses the learner's perceptions of how accommodating the space is for the needs of their physical body and the learning activities in which they are engaged. Scale and aesthetics can be described as the accessibility and attractiveness that the space presents to the user. Ambient factors measure a user's perceptions of temperature, noise, scent and daylight in the space. Architectural elements are those aspects that pertain to the flow and layout of space. Finally, visual environment focuses on the availability and adaptability of the various forms of lighting provided in a physical setting.

To assess students' motivation and self-regulation in the English language, the Engagement in English Language Learning and Self-Regulation (EELLS) survey was adapted from Alzubaidi, Aldridge, and Khine (2016). The EELLS was a modification of Student Adaptive Learning Engagement Survey which was originally developed by Velayutham, Aldridge, and Fraser (2011) to assess students' motivation and self-regulation in science classes. The EELLS includes four scales considered to be important to the engagement of students in English language classes, namely, motivation (as presented by Learning Goal Orientation, Self-Efficacy, and Task Value) and Self-Regulation. Items in the EELLS were responded to using a five-point Likert-type scale. Table 1 provides a description and sample item for each EELLS scale.

Table 1. EELLS Scale to Assess Participants' Motivation and Self-regulation in the English Language

Scale	Description	Sample item
Learning Goal Orientation	The degree to which the student perceives him/herself to be participating in a language classroom for the purpose of learning, understanding, and mastering language concept, as well as improving language skills.	In this language class, it is important for me to learn the language content that is taught.
Task Value	The degree to which the student perceives the language learning tasks to be valuable in terms of interest, importance, and utility.	In this language class, what I learn can be used in my daily life.
Self-Efficacy	The degree to which the student is confident and believes in his/her own ability in successfully performing language learning tasks.	In this language class, even if the work is hard, I can learn it.
Self-Regulation	The degree to which the student controls and regulates his/her effort in language learning tasks.	In this language learning class, even when tasks are uninteresting, I keep working.

Data Collection and Data Analysis

The SPACES and the EELLS were both modified to ensure their suitability in English language classes and the relevance of items in the Iranian context. Careful modifications of the items in each of the surveys were made to ensure that they were suitable for the context of the study. Once modified, the two surveys were pilot tested with a randomly selected sample of 20 students. Half of these 20 students were randomly selected, asked to be involved in focus group interviews, used to examine the readability of the surveys, and used to ensure that participants interpreted the items in ways that were intended by the researchers. In addition, the pilot study was used to ensure that there were no technical issues related to the administration of the two surveys and that participants were able to respond to the tests appropriately. Once the researchers were satisfied with the results of the pilot test, the surveys were administered to the 554 participants of the study.

The first step of data analysis procedure concerned reliability and validity of the two questionnaires. The data were fed into SPSS (version 20.0) to firstly examine reliability of the two questionnaires through measures of variance, Eigenvalue, and alpha Cronbach value. Secondly, the discriminant validity of the scales in both questionnaires were calculated through the component correlation matrix.

In the second stage of data analysis, associations between students' perceptions of the language learning environment and their motivation and self-regulation were examined using simple and multiple correlation analyses as well as standardized regression analysis.

Results

Reliability and Validity of the EELLS Survey

The collected data were analyzed to examine the reliability and validity of the EELLS. Principal axis factor analysis with oblique rotation and Kaiser Normalization was used to examine the internal structure of the adapted version of the EELLS in this study. Table 2 reports the factor loadings for the 32 items of the survey in four scales of learning goal orientation, self-efficacy, task value, and self-regulation, indicating that the four-scale a priori factor structure was replicated. The results, reported at the bottom of Table 2, show that the percentage of variance accounted for ranged from 9.46 to 19.73 % for the different scales, with the cumulative variance being 63.85 %. Also, reported at the bottom of Table 2 are the eigenvalues which, for different scales, ranged from 2.37 to 4.93. The internal consistency reliability, using Cronbach's alpha coefficient, was calculated for each EELLS scale. The results, reported at the bottom of Table 2, demonstrate that alpha coefficients for the four scales ranged from 0.73 to 0.85. Thus, the results met the criterion for reliability coefficient set by Streiner and Norman (2003) who established that a cut-off point of above 0.70 is often considered to be acceptable in most social science research situations.

In order to determine the discriminant validity of the scales in EELLS, the component correlation matrix, generated during oblique rotation, was used. Table 3 portrays the results of this analysis. The highest correlation was 0.62, thereby meeting Brown's (2006) recommended cut-off criterion of 0.80. These results strongly support the factorial validity of the revised four-scale version of the EELLS when used with Iranian university-level EFL students in the present study.

Table 2. Factor Loadings for the Adapted Version of the EELLS

Item No.	Factor loading			
	Learning Goal Orientation	Task Value	Self-Efficacy	Self-Regulation
1	0.73			
2	0.54			
3	0.78			
4	0.77			
5	0.74			
6	0.81			
7	0.78			
8	0.71			
9		0.61		
10		0.73		
11		0.75		
12		0.69		
13		0.74		
14		0.75		
15		0.77		
16		0.74		
17			0.65	
18			0.69	
19			0.68	
20			0.66	
21			0.63	
22			0.65	
23			0.60	
24			0.51	
25				0.71
26				0.77
27				0.72
28				0.73
29				0.74
30				0.70
31				0.73
32				0.71
Variance (%)	19.73	18.16	9.46	16.50
Eigenvalue	4.93	4.54	2.37	4.12
Alpha reliability	0.77	0.77	0.73	0.85

Table 3. Component Correlation Matrix for the EELLS

Scale	Learning Goal Orientation	Task Value	Self-Efficacy	Self-Regulation
Learning Goal Orientation	-			
Task Value	0.40	-		
Self-Efficacy	0.62	0.44	-	
Self-Regulation	0.42	0.46	0.37	-

On the whole, the results of reliability and validity analyses are consistent with previous research involving the use of adapted versions of EELLS for different contexts (e.g., Alzubaidi, Aldridge & Khine, 2016; Velayutham & Aldridge, 2013; Velayutham et al., 2011, 2012). In conclusion, the findings suggest that the results can be interpreted with confidence and rigor.

Reliability and Validity of the SPACES Survey

In order to determine the scale reliability of the SPACES survey Cronbach's alpha coefficient was measured. The survey demonstrated good reliability because Cronbach's alpha coefficient for each scale appeared to be greater than 0.70 which according to Streiner and Norman (2003) demonstrates good internal consistency. Table 4 reports the results of reliability measures of the SPACES survey.

Table 4. Reliability of Scales in the SPACES Survey

Measure/Scale	Architecture	Ambient factors	Spatial environment	Visual environment	Scale/Aesthetics
Reliability (Cronbach alpha)	0.717	0.716	0.788	0.800	0.743

Furthermore, the discriminant validity of the scales in SPACES was examined through the component correlation matrix, generated during oblique rotation. Table 5 presents the results of the validity statistics. The highest correlation was 0.65 which meets Brown's (2006) recommended cut-off criterion of 0.80. Thus, it could be concluded that discriminant validity measures were adequate indicating that scales on the SPACES instrument measure discrete (overlapping) factors in the environment.

Table 5. Component Correlation Matrix for the SPACES

Scale	Architecture	Ambient factors	Spatial environment	Visual environment	Scale/Aesthetics
Architecture	-				
Ambient factors	0.40	-			
Spatial environment	0.65	0.44	-		
Visual environment	0.42	0.46	0.48	-	
Scale/Aesthetics	0.58	0.50	0.46	0.40	-

Associations between Students' Perceptions of the Language Learning Environment and Their Motivation and Self-regulation

Both simple and multiple correlation analyses were used to investigate whether relationships exist between students' perceptions of their language learning environment and their motivation and self-regulation. The results of the simple correlation (r) analysis, reported in Table 6, show that all five of the SPACES scales were statistically significantly ($p < 0.05$) related to Learning Goal Orientation, Task Value, Self-Regulation, and Self-Efficacy.

The multiple correlation (R) – depicted at the bottom of Table 6 – for the seven scales was statistically significant ($p < 0.01$) for each of the four language engagement and self-regulation scales and ranged from 0.33 to 0.44 for different scales.

Regression analysis was used to test if the learning environment factors significantly predicted participants' perceptions of motivation and self-regulation in language learning. The estimates of standardized regression weights (β) are represented in Table 6. The results indicate that all the five scales of SPACES (namely, Architecture, Ambient factors, Spatial environment, and Scale/Aesthetics) significantly ($p < 0.05$) predicted Learning Goal Orientation, Task Value, Self-Regulation, and Self-Efficacy.

Table 6. Simple Correlation and Multiple Regression Analysis for Associations between Language Learning Environment and Motivation and Self-regulation

scale	motivation-environment associations							
	learning goal orientation		Task Value		Self-Efficacy		Self-Regulation	
	r	β	r	β	r	β	r	β
Architecture	0.25**	0.24**	0.26**	0.08**	0.17**	0.20**	0.22**	0.10**
Ambient factors	0.08**	0.03**	0.08**	0.01**	0.11**	0.08**	0.16**	0.08*
Spatial environment	0.07*	0.10**	0.07*	0.03**	0.17**	0.05**	0.13**	0.12**
Visual environment	0.17**	0.03**	0.17**	0.13**	0.21**	0.16**	0.28**	0.16**
Scale/Aesthetics	0.33**	0.19**	0.30**	0.14**	0.14**	0.23**	0.30**	0.11**
Multiple Correlation (R)		0.44**		0.41**		0.40**		0.33**

* $p < 0.05$; ** $p < 0.01$; N=554 students

Discussion

As the first consideration, the EELSS and SPACES questionnaires underwent rigorous reliability and validity analyses. The results provided strong support for high internal consistency, reliability, and strong factorial validity of the adapted versions of both EELLS and SPACES questionnaires. This ensures the accuracy and consistency of the results and confirms that the findings of subsequent analyses could be interpreted with confidence.

In order to address the research question of the study, simple correlation, multiple correlation, and standardized regression analyses were performed on the data collected from 554 university-level Iranian English students in 7 different universities, to determine whether associations exist between the five scales of the SPACES (Architecture, Ambient factors, Spatial

environment, and Scale/Aesthetics) and the four scales of the EELLS (Learning Goal Orientation, Task Value, Self-Efficacy, and Self-Regulation).

Simple correlation (r) analysis suggested that all the five aspects of the environment were likely to influence students' Learning Goal Orientation, Task Value, Self-Efficacy, and Self-Regulation in learning English as a foreign language. Furthermore, the multiple correlation (R) for all the five scales of the SPACES was statistically significant ($p < 0.01$) for all the four outcomes of the EELLS.

Moreover, the results of the multiple regression (β) showed a consistently strong, independent, and positive relationship between students' perceptions of the language learning environments and their foreign language learning motivation and self-regulation.

Taken together, the statistically significant relationship between different aspects of the language learning environment and engagement in L2 learning suggests that students are likely to have higher levels of motivation and self-regulation in classes with idyllic learning environments. The findings are consistent with previous work which demonstrated a strong and consistent link between physical environment and learning outcomes (e.g., Aldridge, Laugksch & Fraser, 2006; Astin, 1975; Pascarella & Terenzini, 1980, 1991; Strange & Banning, 2001; Tinto, 1987; Wolf & Fraser, 2008). Previous research findings have demonstrated that the physical environment can have such an impact on students that it could affect a student's academic progress by as much as 25% (Fraser, 2012, 2014).

If not approached correctly, a language classroom can be set up in a way that stifles motivation or does not promote a positive learning environment that fosters self-regulation. As the findings of the current study indicate, this can be affected by certain factors and may relate to a variety of details. There are parameters pertaining to the architecture of the language learning place. Also, there are elements such as spatial, visual, and aesthetics features of the environment. When a student first steps into a language learning setting, s/he will make a judgment about the type of class s/he is going to be taking. S/he will look to see how desks are arranged and notice what kind of facilities and resources are available. That is to say the way the language learning setting is set up communicates with the students non-verbally. It conveys that they will not just sit and take notes, but they will act out the language that they are learning.

A prime example that reflects the importance of spatial features of the language learning environment, is the organization of the classroom. Disorganized classrooms can take the focus away from language learning and demotivate the students. Furniture should be in good condition to help students remain comfortable and centered on their studies. Desks and chairs that are in disrepair can be distractingly uncomfortable, and a lack of seating, visibility, and comfort can pull student attention away from lessons. Seating that is well-spaced and comfortable can provide your students with a good vantage point from which to see the entire lesson clearly. Proper seating also gives the teacher the ability to walk freely between desks and provide each student with personal attention when necessary.

A noteworthy modification for a language classroom that is utilized by many teachers is the student seating arrangement. This small adaptation can have large impacts on engagement, motivation, self-regulation, and success of the students in a language class. There are numerous different ways to organize the seating structure within the classroom. Pairing this skill along with the organization of how desks are arranged can greatly increase student productivity. A teacher must be mindful of not only where in the room a student is seated, but also by whom they are seated (Grubaugh & Houston, 1990).

Another important factor that according to the findings of the current study contributes to the language motivation and self-regulation of the students is the characteristics of the visual

environment. These features generally relate to availability and adaptability of various forms of lighting provided in the physical environment (Zandvliet & Broekhuizen, 2017). Light can play a major role in determining whether or not a student is engaged in the lesson. The majority of schools use fluorescent light bulbs. These create a buzzing that distracts as well as make it difficult for someone who prefers natural lighting. It is understandable that some classrooms do not have the ability to utilize natural lighting in the classroom. However, the use of lamps with softer lighting can create a warmer environment for students to focus. There is potential danger here though because it could lead to students becoming more sleepy and lazy, so teachers must look for this and make adjustments as needed (Burke & Burke-Samide, 2004).

Another dynamic of a language learning setting that can impact students' language motivation and self-regulation is the non-physical environment, categorized as the ambient features in the SPACES scale. These are elements of a language learning setting that teachers or practitioners cannot physically touch, but they can alter them to increase focus and classroom productivity (Zandvliet & Broekhuizen, 2017). One ambient aspect of the language learning setting that is difficult to control but can play a large part in keeping students engaged is the classroom temperature. This can be a tricky facet to modify in the classroom since many schools use a central heating system. Too cold or too warm of a classroom can make students sluggish or inattentive. Also, poor circulation of air can create dust or air pollution that can affect students' allergies. A classroom with fresh, warm air can create an atmosphere conducive to learning (Temple, 2007).

In regards to another ambient feature of the language learning environment namely sound, teachers must be mindful of this element in the classroom. Sound can play a very important role in the attention and success of a language learner. Things such as a noisy hallway or a student tapping their pencil repeatedly on the desk can greatly distract a student (Burke & Burke-Samide, 2004). Normally, students look for anything to distract them from the lesson, regardless of how trivial it may seem. Removing problems created by things such as temperature, light, or sound removes potential distractions for students.

Overall, the results of this investigation show that the language learning environment plays a crucial role in keeping students engaged and motivated, and allowing them to be successful in regulating their language learning. All of the environmental factors investigated in the current study appeared to play a significant role in determining whether the language learning setting will be conducive for language learning. Each may not have a large effect individually, however together they can work to strengthen a student's ability to get motivated and achieve self-regulation.

The present findings offer valuable implications for policy makers, pedagogues, and practitioners in the realm of second/foreign language learning. First of all, the combination of findings provides some support for the conceptual premise that to improve student motivation and self-regulation in English language classes, special attention should be paid to architectural, ecological, environmental, and place-based factors that, according to the findings of this study, contribute directly to the realities of second/foreign language learning. Each of these factors not only can impact a student's focus and achievement in language achievement, but also can affect a teacher's attitude in the class. It is important for a teacher to understand this cause and effect in order to understand how to organize her classroom to create a better language learning environment.

Furthermore, students who are somehow involved in organizing and structuring their language learning environment, experience a sense of empowerment and community that can help increase their overall motivation and engagement. Therefore, an implication that might emerge from the study is that EFL pedagogues and practitioners wishing to improve the motivation and self-regulation of the students would benefit from having the language learners involve in the creation of

their environment through artwork, configuration, or participation in the physical dynamics of the classroom.

Conclusion

Four decades of learning environment research offer compelling evidence to suggest that the classroom environment as perceived by students is predictive of student outcomes such as attitudes, behaviors and cognition (Fraser, 2007, 2014). The present study further contributed to this inquiry by demonstrating that the characteristics of language learning setting are important determiners of language motivation and self-regulation as perceived by Iranian university-level English learners.

According to Dornyei (2008), motivation is a key factor in second language engagement and achievement. Motivation provides the primary impetus to initiate learning and the driving force to sustain the continuing learning process which itself leads to self-regulation. Therefore, seeking ways in which students' motivation can be improved is important. According to the findings of the present study one way to increase EFL learners' motivation and self-regulation is to enhance and perk up the physical environment surrounding the language learner. This implies that stakeholders should do well to carefully examine language learning environments that they are creating in terms of architectural, spatial, visual, ambient, and aesthetics features.

It is only fair to acknowledge that research on language learning environment is still in its infancy. Therefore, further studies on a greater scale within this field are recommended. This line of research could be enhanced by further studies of student perceptions that compare preferred and actual physical learning environments. Also, future work on student perceptions of both physical and psychosocial factors together could provide a rich forum for action research on a complex range of factors that relate to each other and support the learning process for language learners.

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