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Gulcin Cosgun, School of Languages, Özyeğin University, İstanbul, Turkey, ggcosgun@gmail.com

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Investigating the perceptions of students on the use of L1 in departmental courses in a Turkish EMI university

Gülçin Coşgun¹

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ABSTRACT

This paper reports on an investigation of Turkish English-medium university students' perceptions of the use of L1 in departmental courses in a Turkish foundation university, where the medium of instruction is English. Results revealed that 1) students think English-medium instruction should be adopted since it is fundamental to their career 2) both students and lecturers feel the need to resort to L1 during the lessons despite the language policy of English-only 3) although students believe that the medium should be English, they feel that using Turkish in EMI context can contribute to the learning of the subject matter. These findings suggest insightful implications for English-medium universities in Turkey and all around the world.

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Globalization, migration, mobility and the expanded and rapid circulation of information have led to the spread of English. This dispersion of English has established a strong motive for both societal and individual bilingualism and even multilingualism all around the world. Therefore, a growing number of institutions of higher education in non-English spoken countries choose English as a preferred medium and this phenomenon is defined by Coleman (2006) as "Englishization of European Higher Education" (p. 1). Turkey, where English is not officially used, has also adopted diverse educational policies and gone through this Englishization process. In Turkey increasing number of universities have been using English as a Medium of Instruction (EMI), which is defined by Baird (2013) as a context in which "international students can apply for the courses with little or no knowledge of any other language than English, course materials are provided in English, and assessments are in English" (p. 4).

Given the fact that there has been a significant increase in the number of students who opt to study in a university offering EMI, there have been some studies regarding the reasons for the popularity of EMI,

¹ School of Languages, Özyeğin University, İstanbul, Turkey, ggcosgun@gmail.com

the challenges associated with studying in an EMI context and students' perceptions of the impacts. However, there are few studies investigating students' views on the use of L1 in English medium instruction settings. Therefore, the intent of this study is to explore Turkish students' attitudes towards the EMI practices of their schools and their perceptions of Turkish use in EMI classes in the context a Turkish foundation university.

2. Literature Review

2.1. EMI and Language Policy in Turkish Higher Education Context

Currently, there are 129 state and 75 foundation universities in Turkey (Turkish Higher Education Council (HEC) website). A particular language is not mandated or forbidden by the HEC and universities have the freedom to adopt Turkish, English or mixed Turkish-English as medium of instruction. The first state university with EMI, Middle East Technical University and the first private university in Ankara, Bilkent University, took the lead to offer EMI and since then many universities have started using English as the medium of their instruction (Başıbek, Dolmacı, Cengiz, Bür, Dilek & Kara, 2014). This phenomenon might be attributed to the use of English as a lingua franca since it is used for communication among speakers of different languages. This also leads to other motives for higher education institutions such as enhancing their international prestige and offering good career opportunities for their students.

2.2. Debate over EMI

With the increasing number of the higher education institutions adopting EMI due to the previously mentioned reasons, English as the medium of instruction has been one of the debate topics in Turkey. Arguments on whether the instruction should be in English or Turkish have predominantly been placed upon politically driven aggressive views or the issues has been discussed referring to personal ideas rather than to the related research (Sert, 2008).

The advocates of the EMI in which English is the only medium of instruction claim that there are obvious benefits of EMI for students. Having reviewed 30 studies, Dupuy (2000) concluded that advantages of EMI encompass four areas: '(1) foreign language competence; (2) subject matter knowledge; (3) self-confidence in the ability to comprehend and use the target language; and (4) motivation to continue foreign language study beyond the requirement' (p. 215). Some language theories support Dupuy's (2000) claim regarding the impacts of EMI on enhanced language acquisition. The benefit of EMI on language acquisition can be explained with reference to connectionist theory of language acquisition, which claims that "learners gradually build up their knowledge of language through exposure to the thousands of instances of the linguistic features they eventually hear" (Lightbrown & Spada, 2006, p. 41). Since there is continuous exposure to English, learners have the opportunity to make constant connections and improve their linguistic skills. This view can also be supported by referring to Krashen's (1987) input hypothesis. In his input hypothesis, Krashen (1987) claims people acquire language only when they understand language that contains structure that is "a little beyond" where they are. In line with this theory, in an EMI context, learners will make use of use context, their knowledge of the world as well as their extra-linguistic information to help them understand language they are exposed to and automatically improve their language skills.

In their studies, Lin and Morrison (2010) examined the effect that the change in language policy (from English to Chinese) has had on the size of students' English academic vocabulary. Two vocabulary tests were administered to obtain data from 762 first-year students from eight faculties of one Hong Kong university and 413 of these subjects wrote an essay used to identify lexical richness and examine lexical appropriacy. Based on the findings, they report the use of Chinese as the medium of instruction has had a significant negative effect on the size of academic vocabulary of tertiary students. The findings of Rogier's

(2012) study in an attempt to discover what happens to students' English language skills while studying in English-medium classes in UAE universities, also indicate there is a statistically significant score gain in all four of the English-language skill areas that are tested by the IELTS exam after four years of EMI for the participants in this study.

On the other hand, there are counter arguments against using English as the only medium of instruction in countries like Turkey, where English is not an official language. The policy of EMI may turn out to be disadvantageous for learners with insufficient language proficiency to benefit from instruction. Similarly, Dickens (1987) in Sert (2008) reports communication problems experienced by students who undertake their university studies through the medium of English and how this affects their achievement in their departmental studies. In several studies conducted with Korean students in English-medium classes it was also observed that students had difficulty in understanding or participating in the courses delivered in English (Kang & Park, 2005; Kim, 2002).

In studies conducted in Turkish higher education context, similar findings were reported. In Kırkgoz's (2009) study, majority of the students stated that their participation in their departmental courses delivered in English was inhibited due to poor speaking skills in English. Having compared three approaches-English medium instruction, English aided instruction, and Turkish medium instruction- in three Turkish higher education institutions, Sert (2008) came to a similar conclusion that English medium instruction may hinder effective delivery of academic content.

For the reasons stated above, monolingual assumptions are being challenged and "bilingual discourse has started to be seen as the norm by referring to pedagogical practices that use bilingualism as an asset instead of as a problem or burden" (Lasagabaster, 2013, p. 1). Translanguaging, which "reflects typical bilingual behavior" has emerged and has frequently been resorted to by both lecturers and students (Nikula & Moore, 2016, p. 2). Kim, Kweon and Kim (2017) suggest that L1 could be used in a late immersion programme to compensate for the gap between students' L2 proficiency and the level of proficiency that they need to perform effectively in the L2 classroom. Ferguson (2009) came up with three pedagogic functions of L1 use in the classroom: transferring knowledge; managing the classroom; and fostering interpersonal relations. Krashen (2000) also believes that using and developing the first language can help second language development a great deal in two ways. First, when the first language is used to teach subject matter, learners are given knowledge and this helps learners hear and read more comprehensible in the foreign language. Second, when learners develop literacy in the primary language, this can be transferred to the second language. The case described by Menken (2006) in Throop (2007) supports Krashen's claim. In the case described a school did not conform to the norm and went for an increase in the amount of native language instruction (Spanish) with the purpose of helping students to improve their performance on the English Regents exam. They designed a program where English language learners take Spanish language arts courses to prepare them for Spanish Advanced Placement exam because they identified that the skills tested on the Spanish Advanced Placement exam were similar to the skills tested on the English Regents. After the treatment they found out that the pass rates of students on the English Regents exam increased by 50% due to the treatment. Due to the success of the new strategy of increasing the amount of Spanish instruction to improve students' performance, it is now being implemented in schools across the region.

3. Methodology

3.1. Participants

A representative sample of 237 students from a foundation university in Turkey were involved in the study. Students were from various faculties and there were representatives of freshmen, sophomores, juniors and seniors although the proportion was not equal. The first group of participants who completed the questionnaire were selected through the use of the probability sampling technique which is mainly used to collect a large number of quantitative data to represent the population (Teddlie & Tashakkori, 2009). All students were sent an e-mail giving information about the research and invited to participate in the research by responding to a questionnaire. The voluntary participation consent form giving information about the research and approved by the university's ethical board was also attached to the questionnaire. The demographic information of 237 students who completed the questionnaire can be seen in Table 1.

Table 1.

Demographic Information of the Students who Completed the Ouestionnaire

Gender			Faculty			Grade		
	F	%		F	%		F	%
Female	84	35.4	Social Sciences	27	11.4	Freshman	123	51.9
Male	153	64.6	Business	44	18.6	Sophomore	46	19.4
			Architecture and Design	35	14.8	Junior	46	19.4
			Engineering	104	43.9	Senior	22	9.3
			Aviation	10	4.2			
			School of Applied	17	7.2			
			Sciences					

The second group of participants who were involved in the interviews was selected through the use of convenience sampling technique among the first group of participants. The researcher chose the samples as they were available for the study (Fraenkel & Wallen, 2009). The second group of participants who volunteered to be interviewed consisted of eight students. The demographic information of these 8 students can be seen in Table 2.

Table 2.

Demographic Information of the Students Involved in the Interview

Gender			Faculty			Grade		
	F	%		F	%		F	%
Female	3	37.5	Social Sciences	2	25	Freshman	1	12.5
Male	5	62.5	Business	3	37.5	Sophomore	5	62.5
			Engineering	2	25	Junior	2	25
			Aviation	1	12.5			

3.2. Data Collection Tools

This paper encompasses a mixed method approach to broaden understanding by incorporating both qualitative and quantitative research. In order to collect quantitative data, the questionnaire that was designed by Tung, Raymond, and Tsang (1997) was used with some modifications to make the statements fit the context of the study. The questionnaire consisted of two parts. The first part included items related to individual background information and the second part included 24 items to learn about the participants' perceptions on the issue. All the items required respondents to rate a given statement according to a five-point likert scale.

As for the qualitative data, semi-structured interviews were used. The interviews were conducted individually, using a semi-structured interview protocol. They approximately took 10-15 minutes. Before

beginning to record participants' voices, they were given the interview protocol and asked to sign the consent form. Below are the main questions that were asked during the interviews:

- Do you use your 1st language in class? (If, no) Why? / (If, yes) How often do you use it? In what types of situations/tasks do you mostly use your 1st language in class?
- Which one do you think is better: L1 or English use in class? Why?
- Do your lecturers use 1st language in class? Is it useful?

3.3. Data Analysis

The participants' perceptions on the issue were analyzed using SPSS with summary measures such as means and standard deviations. After descriptive analysis of the responses, since the items were adapted from a previously used questionnaire and used with students from totally different backgrounds, the Cronbach's alpha value was calculated to determine if the scale is reliable and an exploratory factor analysis has been used to identify underlying factors that determine participants' responses to items for the student questionnaire. Principal components analysis with an oblimin rotation was used to identify the factorability of the 24 items of the student questionnaire.

Since the research questions were under different categories, patterns and codes for these categories were identified to interpret and organize the qualitative data. During the analysis, a constant comparative method and discrepant data analysis were adopted. In addition to qualitative-theme based analysis, the number of each participant's answer were counted to calculate the percentages of answers in each category. After the preliminary analysis, respondent validation was used to eliminate the possibility of misinterpreting the meaning of what participants say.

4. Results and Discussion

4. 1. Findings of the Questionnaire

The Cronbach's alpha value of the questionnaire was found .72 (N=237) providing a good support for internal consistency reliability. The major findings including the mean, standard deviations, factor loadings and communalities as regards 24 items in the questionnaire are presented in Table 3. It was observed that all items correlated at least .3 with at least one other item, showing that there was reasonable factorability in the data. The value for the Kaiser-Meyer-Olkin measure of sampling adequacy (.80) and Bartlett's test of sphericity value (p < .001) also indicated that the sampling was adequate and the strength of the relationships among variables was high. Finally, the communalities were all above .5 further confirming that each item shared some common variance with other items. Thus, it was acceptable to proceed with the analysis. Based on the results, a four-factor structure for 24 items was evident.

The first factor had an eigenvalue of 5.2, and it accounted for 20.9% of the variance in the data. Factor two accounted for a further 11.1% of the variance with an eigenvalue of 2.7. The eigenvalues for factors three and four were 1.6 and 1.2 respectively, together accounting for a further 12% of the total variance.

Table 3 indicates that the student responses can be analyzed into four correlated factors. First, students believe that they can be more successful in Turkish-medium instruction (Factor I). They think they can obtain higher marks answering examination questions in Turkish (item 1, mean=3.64), they can obtain better results in subjects that they study in Turkish than the ones they study in English (item 2, mean=3.43) and they can write better in Turkish than in English (item 4, mean=3.60). They think the greatest difficulty in using English to study is learning a great many new words (item 6, mean=3.15).

Table 3.

An Analysis of Student Attitudes Towards the Instructional Medium into Four Factors.

Item No	Statement	Mean (St.	Factor Loading	Commun ality
		Dev.)		-
Factor 1.	Students can be more successful in Turkish-medium instruction.			
1	I can obtain higher marks answering examination questions in Turkish.	3.64 (1.10)	.64	.61
2	I obtain better results in subjects that I study in Turkish than the ones I study in English.	3.43 (1.06)	.70	.72
3	I feel that I can save a lot of time studying all subjects in Turkish rather than in English.	3.13 (1.22)	.67	.61
4	I feel that I can write better in Turkish than in English.	3.60 (1.22)	.52	.53
5	I am more motivated when I use Turkish (and not English) to study non-language subjects (e.g., Mathematics, Science, Geography, and History).	3.30 (1.29)	.75	.67
6	I think the greatest difficulty in using English to study is learning a great many new words.	3.15 (1.20)	.53	.58
7	If the teacher teaches in Turkish, the classroom atmosphere would be more conducive to learning.	3.21 (1.23)	.65	.50
8	I support adopting mother-tongue education at the school where I study.	2.70 (1.20)	.66	.58
18	I think the great majority of the universities in Turkey should gradually adopt Turkish as the medium of instruction within the next five to ten years.	2.62 (.92)	.48	.54
21	Teachers should use Turkish as the main medium of instruction at the beginning of term, gradually increasing the use of English as a medium of instruction, so that	3.24 (1.11)	.55	.56
23	students can get used to studying in English step by step. I feel that learning Turkish well will help me to learn English well.	2.83	.40	.66
24	·	(1.15) 2.24	.66	.61
	We communicate in Turkish in our everyday life, so we should study in Turkish.	(1.23)	.00	.01
	English is a more effective language for my future career.	0.70	(2	(0)
9	I think learning English well is more important than learning Turkish well.	3.79 (1.16)	.62	.69
11	I feel English has a higher status than Turkish in Turkey at present.	3.78 (1.15)	.51	.58
12	I think the great majority of the universities in Turkey should still use English as a medium of instruction within the next five to ten years.	3.79 (0.92)	.35	.68
13	I feel that studying all subjects in Turkish will lower the standard of my English.	3.74 (1.05)	.42	.63
14	I feel that studying all subjects in English will help raise the standard of my English.	4.16 (.92)	.62	.55
15	I think that all the university students in Turkey should study all subjects in English.	3.29 (1.27)	.50	.57
Factor 3.	Turkish can be used with low achievers.			
16	I feel that it is more difficult to learn special terminology in Turkish than in English.	2.92 (1.10)	.48	.68
18	I feel that high-achieving students should study in English, while low-achieving students should study in Turkish.	2.69 (1.20)	.30	.50
19	I feel that my abilities in Turkish and English are mutually reinforcing.	3.40 (.85)	.37	.69
Factor 4.	Using Turkish in EMI context can contribute to learning the subject matter.	` '		

21	I feel that teachers using both English and Turkish within the same lesson can	3.66	.40	.66	
	facilitate students' learning of the contents of each subject.	(.96)			
22	I feel that the teacher's method of teaching is more important than the medium s/he	3.80	.51	.61	
	uses for instruction.	(.92)			

4. 1. Findings of the Interviews

Similar findings were observed in the analysis of the interviews. The analysis revealed all the participants use their first language in classroom since they are more successful in expressing themselves in Turkish. An epistemological change in which students' everyday languaging and school languaging is 'expanded' and 'integrated' was evident in students' responses to the questions (Garcia & Wei, 2014, p. 69). Five of the participants, which accounts for 62.5%, stated that they mostly need to L1 when they cannot express themselves effectively in Turkish. Participant F said,

When students have difficulty in explaining somethings teachers can explain it in Turkish. And students can be allowed to use Turkish because they know the answer. They can explain it better.

Seven of the participants (87.5%) reported that when they do not understand what their lecturers say, they ask questions in Turkish to their friends. Participant A expressed this as indicated in the following excerpts:

When I do not understand what my professor says, I ask the person sitting next to me what he is talking about...I don't want to miss important points.

Four of them (50%) state that when they do not know the vocabulary items, they either ask the meaning of it in Turkish or say the Turkish equivalent to complete their sentences. Participant B reported this in the following way:

I ask questions in English but sometimes my English is not enough to explain myself. Then, I ask my questions in Turkish to my professors. I do not know the words. I ask the teacher then I continue my sentence.

Three of the students (37.5%) reported that they always use Turkish during group work. Two of them (25%) also state that they use Turkish to chat with friends. When the reasons for the codeswitching were examined during the interviews, 'multiple functioning of codeswitching' were identified, which was very similar to the findings of Merritt, Cleghorn, Abagi and Bunyi (1992) in their study with Kenyan primary school students (p. 114). Three students (37.5%) feel the need to use Turkish since they do not want to miss important points. Four of them (50%) stated that they can express themselves easily when they use Turkish. Two of them (25%) state that it is time-saving to use Turkish especially during group work. Participant B stated his ideas in the following sentences:

It (using L1 in group work) is time saving. It is quick. You just ask and your friend answers.

One student (12.5%) stated that he uses Turkish because it is natural. One student (12.5%) uses Turkish because he lacks self-confidence. One student (12.5%) admits if it is not compulsory, he does not use English.

4.3. Discussion of the Findings

With the findings of the questionnaire and the interviews, it is evident that student feel they can express themselves better in their first language and also they may need their first language to clarify important points due to lack of proficiency in the second language. The findings are compatible with the findings of the study conducted by Hennebry, Lo and Macaro (2012). They found out that students had difficulty in completing the tasks in their departments and reported that although students could generate valuable ideas, they had difficulty in conveying them in an academically acceptable style. These findings indicate that delivering the content only using the second language may hinder the full comprehension and prevent students from achieving their full potential in their departmental studies due their insufficient proficiency in the second language. The findings of Albakri's (2017) study also demonstrated that students experienced great difficulties in their study due to their insufficient language competence and believed that that Arabic as a medium of instruction would lead to a more comprehensive understanding of the content and eventually to better academic performance.

After these findings, it was not surprising to see that students feel using Turkish in EMI context can contribute to learning the subject matter (factor 4). Responses to items 21 (mean=3.66) and 22 (mean=3.80) show that students think using Turkish in EMI context can contribute to learning the subject matter. They believe teachers can use both English and Turkish within the same lesson if needed since they believe that it can facilitate students' learning of the contents of each subject. The interview findings also match these findings. All participants reported that their lecturers sometimes switch into Turkish in classroom despite the English-only policy and there were different reasons for lecturers to use L1. The reasons reported are clarifying points (62.5%), telling the equivalent of unknown/technical words (25%), emphasizing important points especially when they are setting a task (25%) and making jokes or talking about general things in classroom (25%).

Whatever the reason is, all the participants found using L1 useful. The first reason why they found it useful is that it attracts the attention of the learners (37.5%). Another reason is that they feel more comfortable and participate more when the lecturer uses L1 (37.5). This is compatible with what Prokisch (2004) concludes in his article in which he reports the problems of students at a Dutch university due to EMI. According to his study, students experience problems during academic discussions due to their insufficient language skills. One student (12.5) also stated that he feels closer to the lecturer when he uses L1. Finally, one student (12.5%) believes that he feels safer since the teacher summarize key points. In their small-scale qualitative study, Rowland and Murray (2020) also reported that there was some variation in whether and how lecturers used L1 and students were similarly favourably disposed to the use of some L1 in lectures, especially in the case of difficult subjects or concepts. As Cleghorn (1992) notes, 'the use of the local language, along with English, provides a means for linking the cultural context of instruction to experiences outside of school and offers a tool for connecting the concrete to the abstract' (p. 319). Similarly, having conducted a study on the use of L1 in classrooms where the prime pedagogical objective is to teach academic content through English as a second language, Macaro, Tian and Chu (2020) concluded that when some teachers switched to the L1 to explain some concepts in their academic disciplines, students were unperturbed by these switches although some students stated that the teacher could have made more of an effort to explain concepts in English first.

According to survey results, it is surprising that although students believe if the teacher teaches in Turkish, the classroom atmosphere would be more conducive to learning (item 7, mean=3.21), they are against adopting mother-tongue education at the school where they study (item 24, mean=2.24). The reason might be the fact that they feel that English is a more effective language for their future career (Factor 2). Regarding item 12 (mean=3.79) and item 15 (mean=3.29) most of the students think university students in Turkey should study all subjects in English. They think learning English well is more important than

learning Turkish well (item=9, mean=3.79) and they agree that English has a higher status than Turkish in Turkey at present (item=11, mean=3.78). Item 13 (mean=3.74) and item 14 (mean=4.16) also indicate that students believe EMI will contribute to their English proficiency. The analysis of the interview findings also revealed all participants agree that the medium of instruction should be English in classroom. The reason was the same. 62.5 % of the participants believe that without English they cannot find a good job and 75% of the students stated that to improve their English skills, they need to use it in class. Participant A stated this in the following sentences:

As everyone knows if you don't know English, you cannot find a job. That is so simple. This is the reason I am in this university.

Students have mixed feelings about the issue. On the one hand they are aware of the benefits of using L1 in content lessons but on the other hand they all believe that without English they cannot achieve their career goals. That's why students are not sure whether Turkish can be used with low achievers (Factor 3). Although they feel that their abilities in Turkish and English are mutually reinforcing (item 19, mean=3.40), they are nearly neutral about that high-achieving students should study in English, while low-achieving students should study in Turkish (item 18, mean=2.69) and it is more difficult to learn special terminology in Turkish than in English (item 16, mean=2.92). Even if they know that they may not be successful in the foreign language, since they know the benefits of it for their career, they do not want to eliminate it from their studies. Similarly, although all participants find their lecturers' use of English useful, they emphasize that it should be limited since they are aware of the fact that they have to learn English for a desirable career. These findings are compatible with Ekoç's (2018) study with 252 undergraduate students in a technical university at Turkey. The students who participated in Ekoç's (2018) study reported that although EMI provides several benefits, such as getting ready for work life, there are also drawbacks of using English in the lectures such as linguistic challenges, some lecturers having limited English proficiency and ineffective courses.

5. Conclusion

The findings of the study reveal that both students and faculty members feel the need to switch from English to Turkish during their practices in the classroom despite the language policy of English-only in the classroom. The main reason for this switch is that both students and lecturers want to ensure that students actually understand lesson content, which is necessary to be successful in both their academic studies and career. Therefore, students appreciate that their teachers are incorporating the local language into their teaching. However, they are aware that English is fundamental to their career prospects and believe that the medium should be English.

One pedagogical suggestion that has emerged to account for the perceived needs of students in an EMI context is that lecturers may allow translanguaging at least until students feel more competent in the foreign language because due to lack of proficiency some students might miss some important points in the subject matter. This may even require a change in language policy in the next few years to and allow some room for both teachers and students to shift into the local language to enable students gain a deeper insight into lesson content.

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