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I would like to thank my colleagues who have contributed to the journal with their articles.

Prof. Dr. Ahmet AKKAYA
Editor

Base for Electronic Educational Sciences (BEDU)

E-ISSN: 2718-0107

Plagiarism program in which articles are scanned

Volume 4/2 September 2023
Total Number of Issues 7
Elaziğ / Turkey

Base for Electronic Educational Sciences (BEDU)

E-ISSN: 2718-0107

Base for Electronic Educational Sciences (BEDU)

E-ISSN: 2718-0107

CONTENTS

Exploring University EFL students' Readiness for Learner Autonomy: A Quantitative Approach

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Abstract

The past few decades have seen a growing recognition of the importance of assuming responsibility for one's learning. Indeed, there is an emerging consensus that the university model needs to equip learners with the necessary skills that will set them up for taking control over their learning and therefore compete in this world of dynamism. However, in the local context, scant attention has been given to how autonomy is perceived and how ready students are to assume it. The present paper seeks to fill this gap by investigating university students' perceived level of readiness for autonomy in their learning. Accordingly, 107 students majoring in English completed questionnaires at a university. The items of the questionnaire were arranged on a five-point Likert-scale continuum. Students were non-randomly selected and voluntarily completed all the items of the questionnaire. The data collected were analyzed using SPSS software. Findings of the study indicated that the majority of EFL students appear to be ready to be autonomous in their learning. The highest percentage pertaining to the levels of agreement responses was manifested in the students' tendency to set their own learning goals. Moreover, the Independent-samples t-test showed that there were no statistically significant differences between males and females. Some recommendations for EFL teachers were also discussed.

Keywords: Autonomy models, goal-setting, learner autonomy, university EFL learners

Introduction

To keep abreast of the demands of the twenty-first century society, people need to be lifelong learners. This requires that education foster individuals who will be able to manage their own affairs by themselves. Similarly, as English language teaching (ELT, henceforth) enters a new century, the shortcomings of the traditional approaches that deemed the learner as the receiver of knowledge from the teacher led to theory and practice that provided the rationale for more learner-centred approaches. Amidst and beyond this change, a body of research has been conducted on the issue of promoting autonomous learners (Benson, 1997; Cotterall, 2000; Creswell, 2000; Little, 1991; Littlewood, 1997; Nunan, 1997; Ouakrime, 1988; Oxford, 2008; Rivers, 2001; Rodrigues, 2003; Sheerin, 1997; Smith, 2008; Voller, 1997, among others). More recently, the issue has continued to be prominent as manifested in the increasingly subsequent literature (Benson & Lamb, 2021; Oxford, 2017; Pawlak, 2017; Phan, 2021; Reinders, 2021; Tassinari, 2018). Therefore, as a result of these fast-paced changes in the field of ELT, the teacher's roles have changed from those which labeled him as the model, the sole authority and "a purveyor of knowledge or wielder of power" (English Guidelines for Moroccan Secondary Schools, 2007, p. 50) to a catalyst, facilitator, and guide (Knowles, 1980; Knowles et al., 2005). This resulted in promoting learner autonomy (Knowles et al., 2015; Littlewood, 1997; Nunan, 2003).

Central to the notion of learner autonomy is the idea that some, in the beginning, thought of it as a western concept that can be cultivated in the western schools only. This, however, falls short of support, as there is a common agreement that autonomy, as an educational goal, is "cross-culturally valid" (Smith, 2008, p. 396). In fact, in the Moroccan context, following a number of reforms at the general policies and educational levels (National Charter of Education and Training, 1999; Strategic Vision, 2015-2030; Framework Law 51-17, 2019), learner autonomy appears to be encouraged and is considered as one of the ultimate goals of education. Indeed, students at the university level should become autonomous learners because at this phase, they have become learners who should be characterized by self-directing their learning (Merriam, 2018). Essentially, they should be able to diagnose their learning needs, formulate learning goals, identify learning materials, use effective learning strategies, and eventually assess their learning (Knowles, 1975). Accordingly, the question that might be addressed is whether learners are ready to assume responsibility for their learning. Hence, the present paper purports to investigate the extent to which Moroccan university EFL learners are ready to become autonomous in their learning.

Over the past few decades, there has been a worldwide renaissance of interest in autonomy in language teaching and learning. It has certainly acquired eminence in second language teaching and learning since the 1980s. This is manifested in the increasingly diverse literature wherein researchers have provided a number of definitions and descriptions of this concept which has become an educational goal (Benson, 2011; Littlewood, 1997; Ouakrime, 1988). The development of autonomy also appeared in a number of language teaching methodology books and chapters (Burns, 2010; Goodwyn & Branson, 2005; Ur, 1999; Woodward, 2009). The advocates of autonomy state that it is a prerequisite for effective learning to take place, and, when developed, it promotes good language learners who will assume more responsibility for their learning (Benson, 2011; Dam, 2008; Little, 1991, 2007; Manchon, 2008; Nunan, 2003; Pawlak, 2017). This increasing interest of researchers in autonomy yielded a wide range of definitions of the concept as well as its models

to delineate what has mistakenly been associated with different misconceptions and therefore devise effective techniques that would help promoting it.

Definitions of learner autonomy

A number of definitions of what autonomy is, and what it does not entail has been put forward by a number of researchers from different perspectives. For example, Little (2007, p. 14), citing Holec (1981), defines autonomy as "the ability to take charge of one's own learning". In fact, this definition could be considered as the most "universally accepted" one and it is the most cited in the related literature (Benson, 2011; Benson & Voller, 1997; Little, 1991, 2007, among others). According to Pichugova et al.'s (2016), they view that Holec in his definition points to the responsibility concerning determining objectives, having a choice over the content to be studied, selecting learning strategies as well as evaluating one's learning. Little (1991) shares the same point with these researchers arguing that this responsibility, as indicated by Holec, is concerned with decisions to be taken with respect to learning aspects, including:

- determining the objectives;

- defining the contents and progressions;

- selecting methods and techniques to be used;

- monitoring the procedure of acquisition properly speaking (rhythm, time, place, etc.);

- evaluating what has been acquired (Little, 1991, p. 7).

Meanwhile, this concept of autonomy has been defined in different ways. Little (1991) defines it as a "*capacity* for detachment, critical reflection, decision-making, and independent action" (p. 4). This capacity implies that "the learner will develop a particular kind of psychological relation to the process and content of his learning" (p. 4). Rather than indicating full independence from the teacher's control, this researcher argues that the teacher-learner relationship should be interdependent, because total detachment usually results in individuals being autistic learners who will deprive themselves from social interaction. Pennycook (1997) suggests that autonomy is essentially about "the struggle to become the author of ones' own world" (p. 39). Similarly, Macaro (1997) considers autonomy as the ability that is acquired through knowing *how* to make decisions about the self as well as being *allowed* to make those decisions. More recently, Little (2007) points to a significant shift of emphasis in defining learner autonomy from something learners do on their own to things they do "for themselves" (p. 14).

Models of learner autonomy

Following the increasingly diverse literature on autonomy, a number of researchers (Benson, 2011; Macaro, 1997, 2008; Nunan, 1997; Oxford, 2003; Tassinari, 2012, among others) have devised various models that summarise the essential components of the concept, but the two influential ones appear to be those of Benson (2011) and Tassinari (2012). Indeed, the discussion on learner autonomy suggests that it is a complex concept, a "construct of constructs" which encompasses a set of dimensions (Tassinari, 2012, p. 28). According to Benson (2011), in order to arrive at an adequate depiction of autonomy, three dimensions should be included, namely "learning management, cognitive processes and learning content" (p. 61), all of which represent learner's control over learning. It is worthwhile noting that these dimensions are interdependent; self-management is affected by the kind of the cognitive processes involved in learning, which likewise affect learning management,

and these two dimensions should be, in turn, engaged in the choice of the learning content.

Tassinari (2012) proposes a more elaborated model comprised of a set of components represented as follows:

- a cognitive and metacognitive component i.e., possessing cognitive and metacognitive knowledge regarding one's learning;

- an affective and a motivational component i.e., dealing with one's feelings and motivating oneself;

- an action-oriented component i.e., decision making;

- a social component i.e., cooperation with others (p. 28).

Each dimension covers a set of descriptors that are further divided into 'can-do' statements.

In total, there are 118 descriptors that are divided into 33 macro-descriptors further divided into 85 micro-descriptors: all these represent indicators of autonomous language learning. Following this researcher, a balance among these four broad dimensions is indeed a characteristic of learner autonomy, and they represent a set of "learners' competencies, skills, and decision-making processes" (p. 28). Her model of autonomy appears to be unique as it is both structurally dynamic in that the underlying descriptors are all interrelated, and functionally dynamic in that learners may begin to engage in any component without following any given order. The non-linearity of this model is in itself an essential characteristic that helps account for the ensuing complexity of learner autonomy (Tassinari, 2018).

The importance of learner autonomy

As early as the 1970s, self-directed learners were reported to be proactive and motivated learners who take the initiative in their learning (Knowles, 1975; Rubin, 1975). Indeed, learner autonomy has been deemed an essential goal of education (Benson, 2011; Knowles, 1980; Littlewood, 1997; Ouakrime, 1988). Subsequently, advocates of autonomy (Benson, 2011; Dam, 2008; Little, 1991; Manchon, 2008; Nunan, 2003; Pawlak, 2017; Pennycook, 1997) argue that it is a prerequisite for successful language learning to take place. For example, Benson (2011) views that autonomous language learners are theoretically supposed to be good language learners, and autonomy, in fact, increases their level of L2 motivation (Dörnyei, 2005). Similarly, Sheerin (1997) contends that effective language learning requires that learners assume responsibility for their learning and that they engage in the decisions affecting the learning process. In addition, autonomous language learning involves the selection and use of a number of learning strategies that help learners cope with their learning effectively (Brown, 2000; O'Malley & Chamot, 1990; Cohen, 2010; Griffiths, 2015; Knowles, 1975; Nhem, 2019; Oxford, 1990, 2001; Nguyen & Gu, 2013; Sturtridge, 1997).

Previous research

A host of studies has been conducted on the similar issue in other EFL contexts. Saeed (2021) carried out a study on university students' readiness for autonomy and concluded that his participants displayed a high degree of readiness and positive perceptions. However, studies carried conducted in other EFL contexts (Alrabia, 2017; Alzubi, et al., 2017; Bekleyen & Selimoglu, 2016; Hozayen, 2011) found that their respondents were identified to have a low level of autonomy readiness in their learning and, thus, were teacher-dependent. Yet another strand of studies found that while students showed some autonomous orientations, they often tended to accept the sole authority of the teacher. For example, Senbayrak et al. (2018) conducted an

exploratory study on students' readiness for autonomy and their attitudes toward self-access centers and found out that "Turkish EFL students were ready to take responsibility for their own learning despite their strong tendency to accept the teacher's power and authority in the learning process" (pp. 11-12). The gender variable in these studies was either not significant or was not considered as a variable at all. All these studies and others have an important implication which is that teachers should work out to promote autonomy in their students.

Since autonomy allows learners to take control over their learning, the purpose of this study is to explore their perceived readiness for autonomy based on their responses to a number of aspects of autonomous learning. Accordingly, the study sets out to answer the following main question:

1. Are Moroccan EFL students ready to assume autonomy in their learning?
2. Are there any statistically differences between the mean scores of males and females?

Method

This section presents the research approach adopted in this study and the procedures followed to answer the research question. Precisely, it will state the research approach, the participants and the type of the sampling technique, the instrument, and the data collection and analysis procedures.

The research design and approach

The design employed in this study is a descriptive one; it is applied by quantitatively generating data, using a self-completion questionnaire. The quantitative approach involves the collection of numerical data, entails the deductive testing of theory, and it adheres to the post-positivist philosophical assumptions (Bryman, 2012; Creswell, 2014). This is taken into consideration while conducting the study.

The participants and the sampling strategy

The targeted population is Moroccan University EFL students at the school of Arts and Humanities, affiliated to Moulay Ismail University, Morocco. 107 participants completed the questionnaires, among these participants, 55% (n=59) are males and 45% (n=48) are females. The participants were non-randomly selected, adhering to the rules of this type of sampling strategy. In fact, with respect to non-random sampling, Bryman (2012) argues that it increases the likelihood of a good response rate; indeed, the number of the questionnaires returned for the present study was high.

The instrument

A questionnaire was used to collect data for the present study, and there is a number of reasons justifying choosing such an instrument over other data collection techniques. For example, the questionnaire allows one to collect data from large samples of participants from various settings. In fact, Dörnyei and Taguchi (2010) argue that this instrument is highly flexible in the sense that it can be administered to different people in different sites. Similarly, the questionnaire is more convenient for the participants to respond to usually without being in haste (Walliman, 2011). It is also cheaper and quicker to administer and, therefore, reduces the tendency of the respondents to exhibit social desirability bias as it can be answered without necessarily the researcher being present (Bryman, 2012).

The questionnaire used in the present study is divided into two main sections. The first one concerns the demographic characteristics of the respondents, namely their gender and age, and the second one, which used the scale designed by Orakci and

Gelisli (2017), deals with their readiness for autonomy in their learning. While the first section contained two questions, the second one is composed of 14 descriptors to which the participants responded on a five-point Likert scale, sequentially ranging between options of "strongly disagree", "agree", "neutral", "disagree", and "strongly agree". Following some researchers such as Converse and Presser (1986) and Wallima (2011), the questionnaire is fairly short and written in a way that ensures the understanding of the items by the respondents so as to avoid any likelihood of overburdening them. Also, the internal consistency of the questionnaire was measured through Cronbach's Alpha, the commonly employed statistical procedure (Bryman, 2012; Loewen & Plonsky, 2016; Perry, 2005; Rasinger, 2010), and was found to be 0.81, which indicates, according to Bryman (2012) and Dörnyei and Taguchi (2010), an acceptable level of reliability.

Data collection and analysis procedures

Before conducting the study, the questionnaire was piloted on 13 students similar to the intended sample since piloting is a crucial stage in any data collection involving surveys (Bryman, 2012; Mertens, 2010; Rasinger, 2013). While piloting, cognitive interviews were conducted with the piloted group as they were completing the survey in order to check for the likelihood of any complex or ambiguous questions. The participants did not experience any difficulty understanding the survey items.

After having successfully piloted the study, and having clearly disclosed its purpose, the final version of the questionnaire was administered to the participants who voluntarily gave their consent to take part, ensuring them that their identity would be kept anonymous. The data were then analyzed using both Microsoft Excel and SPSS 'version 20'. Starting with the background information, or what is called 'factual questions' (Dörnyei & Taguchi, 2010), of the participants, the frequency of their gender was calculated alongside their age range (20-24; 25-28; more than 28). Descriptive statistics were used to examine the students' readiness level of autonomy. The following section will report on the findings of the study. The scale item analysis followed Benson's (2016) description of the attained results. That is, the degrees of agreement or disagreement were analyzed to show the exact extent to which learners were ready to assume autonomy for their learning, because averaging the results into the statistical means would not otherwise indicate this. However, this averaging was only done to examine learner autonomy across gender groups. To see if there are any significant differences between the mean scores of both males and females, Independent-samples t-test were run. The following section will report on the findings of the study.

Results

Demographic characteristics

The number of the participants consists of 59 males and 48 females, they have been categorised into three groups according to their age between 20 and 23 years old (Group 1), between 24 and 28 (Group 2) and above 28 years (Group 3). These gender and age frequencies are shown in charts 1 and 2 below, respectively.
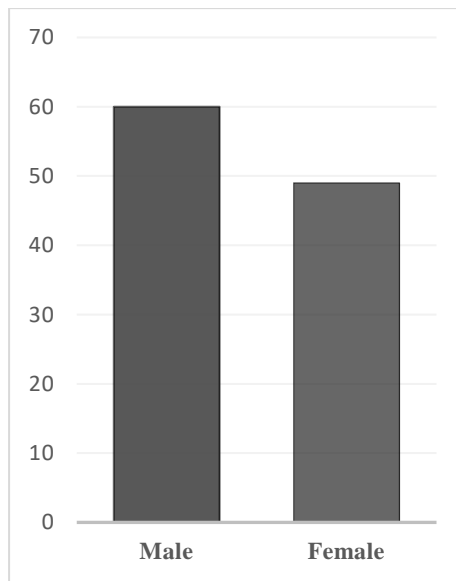
Chart 1: Gender frequency
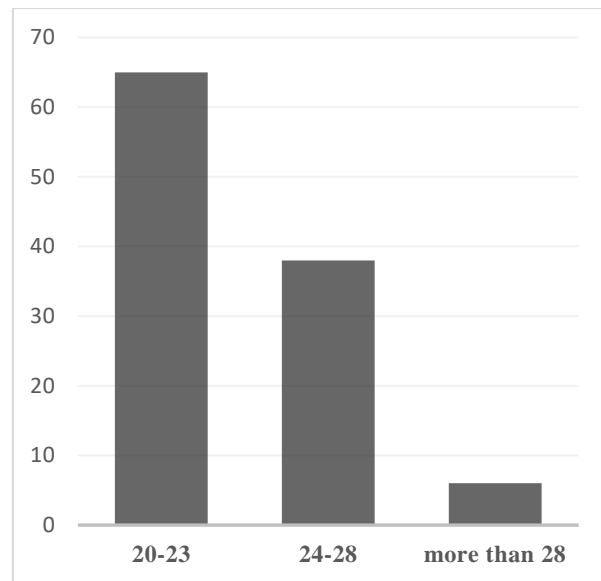
Chart 2: Age frequency

Descriptive statistics for students' readiness for autonomy

Table 1. Learners' level of readiness for autonomy

Items	SD %	D %	N %	A %	SA %
1. I can set my learning goals for me.	2.8	6.4	7.2	58.9	24.8
2. I can learn with and from others (e.g. fellow learners, teachers, etc.).	3.7	8.3	6.4	40.5	42.2
3. I can see what prevents me from completing a task and deal with it accordingly.	1.8	11.0	18.3	58.7	10.1
4. I can use effective time management for learning.	2.8	13.8	22.9	37.6	23.0
5. I can identify my strengths and weaknesses while learning English.	1.8	5.5	11.9	46.8	33.9
6. I can select and use different materials and resources to study English at home.	3.7	5.5	9.2	40.4	41.3
7. I know the Websites and online resources that are useful for my learning.	4.6	6.4	21.9	28.5	26.6
8. I encourage myself to speak in English even though I am afraid to make mistakes.	4.6	9.2	9.2	37.6	39.4
9. I can motivate myself (in a way relevant to me) for my learning.	4.6	3.7	13.8	46.8	31.2
10. I know the method and strategy which suit me best and use them.	2.8	16.5	20.2	39.4	21.1
11. I can determine my own learning needs.	3.7	11.9	18.3	51.4	14.7
12. I can evaluate my progress in English by myself	8.3	24.8	21.1	30.3	15.6
13. I would like to have a say in the choice of activities.	3.7	6.4	23.9	45.0	21.1
14. I do not try to improve my weaknesses.	32	33	9.3	15.6	10.1

Note: (SD) = strongly disagree, (D) = disagree, (N) = neutral, (A) = agree, and (SA) = strongly agree.

The results displayed in the above table indicate that the majority of EFL students' level of readiness appears to be satisfying. This is manifested in the substantially higher percentages obtained throughout the items with respect to agreement responses. Concerning item one, a significant number of the participants agree (58.9%) or strongly agree (24.8%) that they can set learning goals for themselves; only a small number of participants disagree (6.4%) or strongly disagree (2.8%). Regarding item two, the participants agree (40.5%) or strongly agree (42.2%) that they can learn with and from others, be it their colleagues or teachers. Over half of the respondents agree (58.7%) or strongly agree (10.1%) that they can identify what prevents them from completing a given task and deal with it accordingly. Concerning item four, more than half of the participants agree (37.6%) or strongly agree (23.0%) that they can use effective time management for their learning.

Moreover, the results show that the majority of the participants either agree (46.8%) or strongly agree (33.9%) that they can identify their strengths and weaknesses while learning English; very few respondents, however, disagree (5.5%) or strongly disagree (1.8%). According to the item which elicits whether they can select and use different materials and resources to study English at home, 40.4% agree or strongly agree, with again a low percentage (9.2%) pertaining to the disagreement levels. In response to item seven, more than half of the participants agree (30.5%) or strongly agree (26.6%) that they know the Websites and online resources that are useful for their learning. Similarly, results of item eight present that a significant number of the participants agree (37.6%) or strongly agree (39.4%) that they encourage themselves to speak in English. Regarding item nine, a large number of the participants agree (46.8%) or strongly agree (31.2%) that they can motivate themselves in a way relevant to them for their learning, while very few of them are identified to disagree (3.7%) or strongly disagree (4.6%).

Results from item ten demonstrate that a quite significant number of the participants agree (39.4%) or strongly agree (21.1%) that they know the method and strategy which suit them best and use them. Also, more than half of the participants agree (51.4%) or strongly agree (14.7%) that they can determine their own learning needs, whereas only a small number of them disagree (11.9%) or strongly disagree (3.7%). Concerning their readiness to evaluate their progress in English by themselves, a lesser percentage is obtained; that is, few of the participants agree (30.3%) or strongly agree (15.6%), with almost the same number disagreeing (24.8%) or strongly disagreeing (8.3%) with the statement. With regard to statement thirteen, a significant number of the participants agree (45%) or strongly agree (21.1%) that they would like to have a say in the choice of activities. Finally, given the reversed coded item, a large number of the participants disagree (32.1%) or strongly disagree (32.1%) with the fact that they do not try to improve their weaknesses, which means that a total of 65% of the participants in fact do the reverse.

Autonomy across gender groups

To run the independent-samples t-test, the results of the survey were averaged to summarise the mean scores for both groups. The following table presents the descriptive statistics on the gender factor.

Table 2. Descriptive statistics on gender

Gender	Mean	SD
Male	3.73	.63
Female	3.64	.43

As can be seen in the table above, the average of autonomy level achieved by males (*M* = 3.73) is only slightly higher than that achieved by females (M = 3.64).

In order to examine whether there are any statistically differences between both groups' mean scores, Independent-samples t-test was run as follows:

Table 3. Independent-samples t-test for autonomy across gender

| | T-test for equality means | | | |
	df	Sig. (2tailed)	Mean difference	Std. error difference
Equal variances assumed	107	.43	.08372	.10670

Table 3 shows that the difference between males and females in relation to assuming autonomy for their learning is not insignificant (p = .43), a value that is bigger than the norm (p = 0.05). This means that the current study failed to reject the null hypothesis that there are no significant differences between males and females in relation to how autonomous they are.

Having described the results of the study, the following section discusses the findings by highlighting the most rated aspects of autonomous learning as well as discussing them in relation to other studies' findings in other EFL/ ESL contexts.

Discussion

Based on the findings obtained in this study, it appears that EFL students' level of autonomy readiness is generally significantly high. It has been found that the highest percentage, adding the two levels of agreement (83.7%), has been manifested in the students' tendency to set their own goals. This is in accordance with Tin's (2012) study of EFL students who are found to be engaged in setting goals for their learning as the highest rated aspect. In Nunan's (1997) five levels of autonomy implementation, *'creation'* is considered as an equally important level at which learners create and set their own leaning goals, a fact that is demonstrated by the participants. Moreover, according to little (1995), learner autonomy does not indicate a total detachment from one's peers or teachers. In fact, in the present study, it has been found that the level of students' learning with and from others appeared to be the second highest rated aspect (82.8%). The present study also concluded that there are not statistically significant differences between males and females as to their readiness level for autonomy.

Regarding their ability to identify their strengths and weaknesses, students reported a high level of agreement with a percentage of 80.7%, a finding which is congruent with Hayta and Yaprak's (2013) study in which their participants displayed a mean score above average for the same item. Contrary to these results, studies carried out in other EFL contexts (Alrabia, 2017; Alzubi et al., 2017; Bekleyen & Selimoglu, 2016; Hozayen, 2011) found that their respondents were identified to have a low level of autonomy readiness in their learning and, thus, were teacher-dependent. Another related aspect of autonomy readiness is the ability to evaluate ones' own learning with which a lesser percentage of the participants (45.9%) agreed, thereby making it the lowest rated item. Almost a similar finding is found in Chan et al. (2002) study in which 71% of the participants regarded their teachers as mainly responsible for evaluating their learning.

Another equally important aspect of learner autonomy is motivation (Orakci & Gelisli, 2017; Tassinari, 2018), which has been found to be enhanced by the participants to a large extent. Mainly, 78% have reported that they could motivate themselves in their quest for learning. Generally, the rated levels are compatible across the items.

For example, item 5 "I can identify my strengths and weaknesses while learning English," and item 11 "I can determine my own learning needs" have received agreement rates of 80.7% and 66.1%, respectively. These two items are compared because they are interrelated; that is, if students are able to identify their strengths and weaknesses, they can also determine their learning needs. All in all, reflecting on these findings, it could be concluded that the participants have shown a high level of autonomy readiness.

Conclusion

The purpose of this study is to explore Moroccan University EFL students' readiness with regard to their perceived level of autonomous learning. The descriptors, as already discussed, have been devised in such a way as to tap into learners' autonomy readiness level. The majority of these items were formulated as the 'can-do' statements through which learners can assess their competencies and behaviours. In fact, the questionnaire items may also serve as a diagnostic test for teachers to get insights into their students' autonomy level, and accordingly help their learners assume responsibility for their learning.

Overall, Moroccan EFL students' autonomy in learning reached a satisfactory level. The tendency of the students is more directed to setting learning goals for themselves with a percentage of 82.6% of the participants who showed agreement. Indeed, the majority opted for either agree or strongly agree with all the questionnaire items, except for the one that was negatively worded (I do not try to improve my weaknesses), with which most respondents disagreed, indicating that the participants' ratings were conclusive along the statement items. However, it should be noted that the findings of the present study should not mark the end of the inquiry; in other words, although a significant number of students have demonstrated their readiness be autonomous, there are others who have not yet stepped forward in this respect.

Given all this state of affairs, it is imperative that teachers raise their students' awareness of the importance of autonomy and involve them in the decision making concerning the activities to be carried out inside the classroom. Teachers also need to use those autonomy descriptors as a checklist to keep track of their learners' readiness for assuming responsibility for their learning. Moreover, since learner autonomy manifests itself in different degrees and is perceived differently in different contexts, and since it is still unclear how learners and teachers would respond to the changing roles in the Moroccan EFL classes, more research on autonomy should be undertaken. Most importantly, autonomy training should be carried out to effectively implement a working model of autonomy in the hope that university learners take control over their learning.

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Teachers' Attitudes Towards Code-Switching in Teaching English Grammar at Public Secondary Schools in Jerusalem District

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Abstract

The role of L1 in teaching has been always a controversial issue for the researchers. The main purpose for the research was to investigate teachers' attitudes towards using code-switching in teaching English grammar in public secondary schools in Jerusalem district. The researcher used Macaro's (1997) way of classifying the positions for or against the use of the L1 in the L2 classroom as theoretical framework. The results of the study which were collected through distribution a questionnaire to EFL teachers who teach English as a second language. The results of this study indicated that code-switching was sometimes used in the primary English classrooms by both teachers and students. Moreover, the findings indicated that the use of code-switching was commonly used in the EFL classroom, for a range of purposes and with varying degrees of frequency. In other words, teachers use the mother tongue in teaching English grammar for explaining difficult idea or concept. On the other hand, the study revealed that relying heavily on the mother tongue in the EFL classroom will deprive the students of being exposed to English.

Keywords: Code-switching, English as a foreign language (EFL), teaching grammar

Introduction

The issue of the use of a native language to communicate with students in foreign classes has been a matter of controversy for decades. Teachers' strategies and practices in the classroom influence the success in learning English as a foreign language (EFL) (Çelik & Aydın, 2018). What teachers implement in the classroom has been the focus of education researchers in terms of enhancing the classroom environment. Researchers and language teachers have long debated the issues surrounding the use of students' L1 in L2 (Adnan, Mohamad, Yusoff, & Ghazali, 2014; Sadighi, Rahimpour, & Rezaei, 2018). A watershed moment in the teaching of English came when the grammar-translation method was abandoned in the late 19th century, a method promoting the use of L1 in the L2 classroom (Almohaimeed & Almurshed, 2018). In other words, using students' L1 in the L2 classroom was considered a hindrance in the L2 classroom (Hall & Cook, 2014).

Cook (2001) maintains that since L2 learners acquire their L1 without the help of any other languages, they do not need to use their L1 to help them acquire their L2. Nonetheless, he proposes that teachers may use L1 for class management and explaining difficult grammar; this view is supported by Cole (1998), who also suggests that L1 should only be used with students who have low levels of proficiency. Conversely, Krashen (1983), among others, makes the assumption that L1 would influence the plethora of L2 input necessary for the acquisition of L2. There is a dearth of research addressing the perspectives of students regarding their use of L1 (AlSharaeai, 2012) and the use of Arabic in the EFL classroom (Al-Balawi, 2016).

It is known that "grammar is a set of rules that define how words (or parts of words) are combined or changed to form acceptable units of meaning within a language" (Penny, 2000). Grammar, regardless of the country or the language, is the foundation for communication. When a message is relayed with the correct grammar, it is easier to understand the purpose and meaning of that message but when it contains grammatical errors it might be difficult to convey the meaning, and sometimes impossible to understand. Grammar improves the development of fluency so when a person has learned grammar, it will be easier for that person to know how to organize and express the ideas in his/her mind without difficulty. Moreover, students will be able to speak, read and write the language more fluently.

The ability to communicate information accurately, clearly and as intended, is a vital life skill and something that should not be overlooked. Chang (2011) stated the following: "Guaranteeing the accuracy of the sentences mainly depends on the learner's mastery of grammar" (p.13). Grammar, which is an indispensable part of a language, is as important as the teachers and students have always attached great importance to in learning and teaching it. For the above-mentioned reasons, making grammar in teaching and learning effective and efficient is an important task for both English teachers and students.

Most of the research that has been done on code-switching has focused on what functions code-switching can have in bilingual discourse. However, code-switching is a phenomenon that occurs not only in settings where the speakers use several different languages on a daily basis, but also in second language classrooms (Halmari 2004), where it is likely to occur if the teacher and students share the same mother tongue (Cook 2008).

Code-switching in second language classrooms differs from multilingual community codeswitching. In multilingual communities speakers code-switch on a daily basis, making their code-switching a very natural part of their conversation strategies (Valdés-Fallis 1978). Second language learners and teachers, on the other hand, generally share the same first language, which is also often the language of the

community, while the second language is something that both students and teachers are obliged to use in the second language classroom. Learners in a second language classroom also generally have an unequal command of their native language, which is the language they mostly use in school and feel most comfortable using, and of their second language, which they are required to use during their second language lessons and often have a limited knowledge of.

Several researchers suggested that the use of code-switching does not play an essential role in foreign language teaching for example Mattioli (2004) pointed out that "Many English language teaching professionals wonder how students can truly appreciate target language exchanges if they are continually relying on their L1s" (p.22). Larsen-Freeman (1986) also argues how the teacher in her class always tend to translate from English to Spanish. Ellis (1984) notes that the exaggerated use of code-switching could deprive the learners of valuable input in the target language. Auerbach (1993) Realized that many ESL teachers in the classroom believe that the use of code-switching will hinder progress in the acquisition of English and suggested to prevent the students from using their L1. On the other hand, there are many studies that have examined if the use of code-switching is an effective tool for teaching or not. Swain and Lapkin (2000) pointed out that according to several experts of foreign language and second language acquisition agree that L1 should be used with low proficiency learners in the target language. This may suggest that the use of code-switching is important in language teaching especially for students who are not highly proficient in the target language.

In addition, Grammar improves the development of fluency so when a person has learned grammar, it will be easier to know how to organize and express the ideas in his/her mind without difficulty. Moreover, students will be able to speak, read and write the language more fluently. The ability to communicate information accurately, clearly and as intended, is a vital life skill and something that should not be overlooked.

Significance of the Study

This study is significant to the teachers of English as a second language. I hope that my research will benefit the teachers' techniques in the use of code-switching in teaching English grammar and developing their skills.

Statement of the Problem

The role of L1 in teaching has been always a controversial issue for the researchers. The main purpose for the research was to investigate teachers' attitudes towards using Arabic in teaching English grammar in public secondary schools in Jerusalem district. The researcher is studying the use of code-switching in teaching English grammar from teachers' perspectives at secondary school level, since some teachers do not use L1 in teaching grammar, while other teachers rely heavily on using L1 in teaching English.

Research Questions

The researcher is studying the use code-switching in teaching English grammar from teachers' perspectives at secondary school level, since the use of code-switching is a controversial issue for many researchers. This study aimed to answer the following question:

Main question:

> ➢ What are the attitudes of teachers toward using code-switching in teaching English grammar at secondary school level?

Sub questions:

- ➢ To what extend the use of Arabic language considered the best direct method to teach English language in class?

- ➢ Is there any reason to use code-switching when using English language grammar?

Research Hypothesis

- English language teachers forced sometimes to switch into their L1 in order to facilitate teaching.

- Some English language teachers use code-switching in order to simplify the basic rules in English grammar.

Limitation of the study

Since this study is about using code-switching in teaching English; so it is limited to English language teachers who teach English language at public secondary school in Jerusalem district. All teachers were Arab because this study is about using the mother tongue which is Arabic in teaching English Grammar. This study limited to forty male and female English language teachers.

Theoretical Framework

Classifying the positions for or against the use of the L1 in the L2 classroom is the one used in a study performed by Macaro (1997) where he investigates stud teacher students' beliefs and use of the L1 in the L2 classroom. These positions are referred to as The Virtual position, The Maximal position and The Optimal position and can be summarise as follows:

- The Virtual position- where the classroom is perceived as the second language country, which implies total avoidance of the L1 with the belief that the L1 can be excluded as long as the teacher has enough knowledge in the L2.

- The Maximal position- where the L1 is perceived as not having any pedagogical value, but is used anyway, since there can be no perfect teaching or learning conditions for learning a L2 in a L2 classroom.

- The Optimal position- where the L1 is perceived as having some pedagogical value and can actually can facilitate some of the aspects of learning the L2, which makes it important to explore when and where the use of the L1 in the L2 can be justified (Macaro 2001:535).

Literature Review

The issue of acquiring new language has raised opposing and supporting ideas. While some believe that the use of mother tongue language can be really helpful in learning new language. This is because they think that using a new language will facilitate and path the way for teachers and students in dealing with the new language. Whilst, others think that the first language will prevent students from learning new languages. Here, there are some of the researches that have been conducted throughout the years on using code-switching in teaching:

Definitions of code-switching

What is code-switching? According to Heller (1988, p. 1) code-switching is when a person mixes two languages in a single sentence or a conversation. Valdes-Fallis (1978, p. 6) claims that people can mix words, phrases and clauses. When one person switches between two languages, the person is bilingual. According to Baker (2006, p. 3) a bilingual person can use two different languages, but one of these is often the

dominant one. She suggests that some bilinguals are active in both languages whereas other bilinguals are passive, and their skills in one or both languages are less developed. Baker (p. 4) also suggests that there are many dimensions of bilingualism. One of the dimensions is called Elective bilingualism, which means that a person can choose to learn a new language.

Mesthrie, Swann, Deumert and Leap (2010, p. 163) state that code-switching has not always been a field of serious study. The type of conversation that we call code-switching today was previous known as a bilingual's way to choose when s/he wanted to use a certain language. S/he could use one language on a certain occasion and another language on another occasion. According to Gumperz and Hernandez-Chavez (1974) other terms can be used for code-switching, related terms are for instance: code shifting and code mixing.

Code-switching in the foreign language classroom

Although code-switching research is mostly associated with the field of bilingual environments and communities, code-switching in the foreign language classroom is an extensively observed phenomenon. In their work on code-switching, Milroy and Muysken (1995) state that research on code-switching in the classroom has been conducted for almost two decades. Simon (2001) claims that there has been a development in the research of code-switching in foreign language learning. The language classroom has become interesting for researchers. According to Milroy and Muysken (1995) code-switching in the foreign language classroom is international; there has been research on this in the United States, South America, Canada, Europe and South East Asia. What happens when pupils code-switch in the foreign language classroom? Liebscher and Dailey-O'Cain (2005) suggest that foreign language learners switch back to their native language when they feel they meet obstacles in the target language conversation.

Categories of code-switching

The first category is called Equivalence, which occurs when the student lacks competence in the target language, such as when s/he feels that s/he is not competent enough to explain something in the target language. The student therefore instead uses lexical items from the native language. This process is a sort of defensive mechanism. The second category is called Floor-holding. Here the students use native language words to fill gaps in the conversation in order to avoid breaks or open spaces in the conversation. This process may have a negative outcome on language learning if students continue with this type of code-switching for a long period of time. They may lose the competence of fluency in a conversation. The third category is called Reiteration. Pupils use this function in order to reinforce and clarify a message. Students may repeat words and phrases in their native language because they feel they did not clarify a message in the target language but also to show the teacher that s/he has understood the task or content in the situation. Heredia and Brown (2005) state that people often do it in order to be understood better. According to Yule (2010) there is one thing called Communicative competence, which means that L2 learners try to use the foreign language correctly. Rababah (2002) states that there are other strategies within communicative competence. One of them is called interlanguage communication strategies, which means that L2 learners use different types of strategies to get their message through. The learners want to organize their message quickly in order to avoid communication problems. Typical behaviors would be: use words from their native language, mumble, repeat sentences and words, try to avoid certain words which they may find difficult, rephrase words and sentences, ask someone else for the correct word or sentence, and correct themselves by using self-correction as Rababah calls it. Simon (2001) suggests that code-switching in

foreign language classrooms is much more complex to scrutinize than code-switching in social settings. The pupils in the foreign language classroom often have vague knowledge of the target language compared to bilinguals in a social setting. There is indeed a difference between code-switching in educational settings and in social settings. According to Wei and Martin (2009) code-switching in educational settings is often seen as unsuitable and wrong, while code-switching in social contexts is seen as something natural and a part of bilingual speech.

Previous related studies

Alshehri (2017) carried out a study to explore the attitudes of EFL teachers towards using learners' first language (L1) in their classes. It also considers the frequency and functions of using L1 in EFL classes. The participants in this study comprised 104 female teachers. The researcher used questionnaire and interviews in collecting data. The findings reveal that teachers believe that English should be the main language used in the classroom. The results also show that teachers use L1 for some functions in EFL classes, such as explaining vocabulary and developing rapport with students. Moreover, Teachers also report that the majority of their students use L1 mainly for translating new vocabulary and preparing for tasks.

Ghaiyoomian and Zarei (2015) conducted a study to examine the effect of using translation from L2 to L1 on the improvement of EFL learners' language accuracy. The participants in this study consisted of 62 male students in the third grade who were not familiar with the intended grammatical structures. The participants were divided into a control group and an experimental group. A pretest and a posttest were designed to accomplish the aim of this study. The findings of the study revealed that translation from L2 to L1 has improved the accuracy of the students in learning.

Damra and Al Qudah (2012) investigated in their study the effect of using students´ native language (Arabic language) on their achievement and attitudes in learning English grammar. The sample of the study included 80 female students in the ninth grade divided over experimental and control groups. The researcher used pretest, posttest, and questionnaire in collecting data. The findings showed that, the majority of both groups encouraged to use their mother tongue in learning English grammar rule, and they believe in the effectiveness and importance of L1 use. Moreover, were no significant mean differences between the experimental and the control groups in the attitudes measure.

Chang (2011) examined the role of using L2 in teaching grammar first, whether learners in the experimental class can make a significant progress in grammar learning after experiencing an experimental semester. Second, whether learners in the experimental class can make more progress in grammar learning than those in the control class. Third, whether the Grammar Translation Method is more effective in improving learners' learning confidence, and motivation than the Communicative Approach? The sample of this study was 42 students for the experimental group and 44 students for the control group. The researcher used pre-test, post-test, and questionnaire in collecting data, both two tests included 50 multiple choices with a full mark of 100. The findings of the study showed that first, learners in the experimental class made a significant progress in grammar learning after experiencing an experimental semester. Second learners in the experimental class made more progress in grammar learning than those in the control class. Third the grammar translation method is more effective in improving learners' learning confidence, and motivation than the communicative approach.

Rababah (2003) emphasized the importance of using the target language in language teaching. He demonstrates this to professionally characterize the status of EFL learning situation in Jordan. This indicates that teachers in Jordan use Arabic to

teach difficult words and to explain English literature. Vocabulary items are still taught in isolation, though the Communicative Language Teaching approach stresses the importance of teaching vocabulary items in context. The findings of this study pointed out that using the source language in the classroom setting is very beneficial. However, Deller and Rinvolucri (2002) do not support the random use of the native language and warn the language teachers of the negative effects of its over-use in the EFL classroom.

On the other hand, a positive contribution to English learning can be fulfilled through teaching English bilingually if L1 is used at appropriate times and for appropriate reasons (Hamer, 2001; Cameron, 2001; Nation, 2003; Tang, 2002; Sharma, 2006). In addition, Miles (2004) indicates that limited use of the native language can actually facilitate the learning of an L2, and does not hinder it. According to Hadley (2001) students' native language usually plays an important role in most popular English language teaching methods. In their research on bilingualism, Hamers and Blanc (2000) studied how bilinguals carry out a large variety of cognitive tasks in the two languages.

Bilingualism involves having a command of the linguistic system—the phonology, morphology, syntax, semantics, and pragmatics — that constitute the essence of each language, but it also means being able to keep the languages separate cognitively when necessary, and strategies to search the memory store in one language in order to use the information in the other language. The usefulness of first language as a cognitive and a pedagogical tool that facilitates learning has been gaining significance for the last two decades. For instance, Swain and Lapkin (2000) maintain that to assist that no use be made of the L1 in carrying out tasks that are both linguistically and cognitively complex is to deny the use of an important cognitive tool. According to Hadley (2001) students' native language usually plays an important role in most popular English language teaching methods.

Methodology

In this part of the study, the participants, instrumentation, and data collection procedure will be presented in detailed.

Participants

The sample of this study consists of (18 males and 22 females) Palestinian EFL teachers who teach English at public secondary schools at Jerusalem district. Twelve of the teachers were teaching English for 0-5 years; twenty of them were teaching English for 6-10 years; and eight of them were teaching English for 11 years and more. The researcher wanted to elicit the teachers' opinions towards using code-switching in teaching English grammar at public secondary school level.

Instrumentation

In this study an online questionnaire using Google forms (see Appendix A) was distributed to 40 male and female Palestinian EFL teachers who teach English with different years of experience at public secondary schools at Jerusalem district. The questionnaire consists of two parts: the first section is the demographic data. The second section is divided into three parts: the first one consists of 15 statements about teachers' attitudes towards using code-switching in teaching English grammar inside the classroom. The second part consists of 15 statements about teachers' attitudes towards using only English in teaching grammar inside the classroom. The third part consists of 3 open-ended questions. Respondents were asked to indicate the frequency of occurrence on a 5- point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree).

Procedure

In this study the researcher collected the data during the second semester of the academic year 2020/2021 using an online questionnaire on Google forms. The questionnaire has been distributed over 40 male and female Palestinian EFL teachers to elicit their views in using code-switching in teaching English grammar at public secondary school level at Jerusalem district. The means and standard deviations were calculated and displayed in charts using Microsoft Excel 2016.

Results

In this study, an online questionnaire (see Appendix A) was distributed over 40 Palestinian EFL teachers who teach English with different years of experience at public secondary schools at Jerusalem district. Respondents were asked to indicate the frequency of occurrence on a 5- point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree). The results for the questionnaire will be presented in this part of the study.
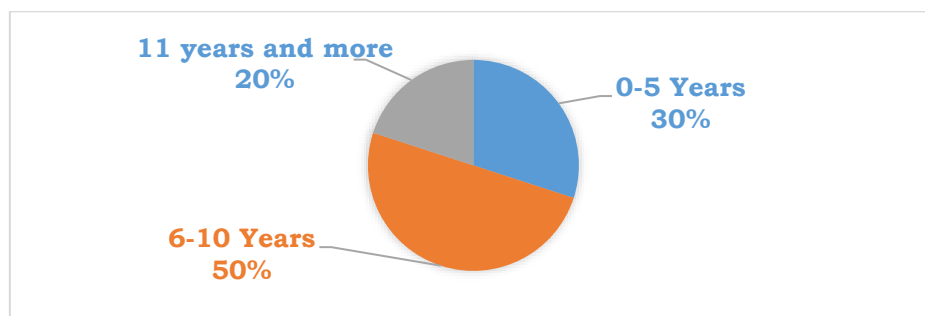
Figure (1): EFL Teachers' Teaching Experience

The questionnaire was distributed to 40 EFL Palestinian teachers in Jerusalem district. Twelve of the teachers were teaching English for 0-5 years; twenty of them were teaching English for 6-10 years; and eight of them were teaching English for 11 years and more.

Table 1

Teachers' Educational Qualifications

Teachers' Educational Qualifications	Number of Teachers	Percentages
B.A.	22	55%
M.A.	18	45%

The table above shows that 55% of EFL teachers hold a B.A. degree; whereas 45% of them hold an M.A. degree.

Table 2

Correction Key for this Study

Strongly agree	1-1.79
Agree	1.8-2.59
Neutral	2.6-3.39
Disagree	3.4-4.19
Strongly disagree	4.2-5

The correction key for this study is (1-1.79 for strongly agree; 1.8-2.59 for agree; 2.6-3.39 for neutral; 3.4-4.19 for disagree; 4.2-5 for strongly disagree).

Table 3

Means and Standard Deviations for the Items that the Participants Agreed On

No.	Statements	Means	SDs
19.	Using English in grammar class makes students think in English.	1.85	4.12
20.	Teachers should speak English as much as possible while presenting grammar rules.	1.95	3.67
25.	Students don't like the teacher to use only English in grammar class.	2.05	3.93
9.	Translating difficult words into L1 is helpful for students in learning grammar rules.	2.1	4.69
18.	Students feel afraid to make mistakes when teacher using English only in grammar class.	2.1	3.39
10.	Some teachers use code-switching when they lack confidence in their own knowledge of English.	2.15	3.93
23.	Students feel uncomfortable and stressed when teachers using the English language in teaching English grammar.	2.2	4.63
22.	Using Arabic in English grammar class makes students think in Arabic.	2.25	2.54
25.	Using code-switching should be minimized to the best of the teacher's ability.	2.25	2.44
2.	Code-switching is necessary to explain difficult concepts or ideas in grammar.	2.25	3.67
29.	Students can understand most of English rules when teachers use code-switching.	2.3	3.87
27.	Using code-switching facilitates the teaching English grammar.	2.4	4.00
1.	Using code-switching in grammar class provides students the opportunity to understand the application of grammar rules.	2.5	2.44
Total of Means		2.18	
Total of Standard Deviations		3.64	

Table 3 shows the means and standards deviations for participants' responses of agree to the items (19,20,25,9,18,10,23,22,25,2,29,27, and 1) of the questionnaire.

Table 4

Means and Standard Deviations for Response of Neutral

No.	Statements	Means	SDs
13.	Teachers use code-switching as a technique to increase students' understanding of grammar rules.	2.6	3.16
21.	Using only L2 in teaching English grammar has a negative impact on students' learning.	2.6	3.16
6.	Arabic is indispensable in teaching English grammar in primary classrooms.	2.65	3.08
19.	Using code-switching in English grammar class provides students the opportunity to participate and give examples.	2.7	3.53
12.	Teachers tend to code switch because they face problems in explaining things in English.	2.7	1.92
22.	The amount of English that teachers use depends on their educational qualifications.	2.75	2.54
15.	Teachers translate grammar rules into Arabic most of the time.	2.75	1.87

Continue of Table 4

No.	Statements	Means	SDs
26.	Using only L2 do not saves time during class.	2.9	4.06
30.	Students cannot understand all rules of English grammar when using only English in grammar class.	2.95	2.73
24.	Using code-switching should be stopped in grammar class.	2.95	1.22
20.	Using code-switching in English classes should be recommended by the educational authorities.	3	3.67
7.	Code-switching can be used to help students improve their grammar proficiency.	3.25	4.18
24.	Teachers find using code-switching in grammar class is boring.	3.3	3.46
	Total of Means	2.85	
	Total of Standard Deviations	2.97	

Table 4 shows the means and standards deviations for participants' responses of neutral to the items (13,21,6,19,12,22,15,26,30,24, 20,7, and 24) of the questionnaire.

Table 5

Means and Standard Deviations for the Items that the Participants Disagreed On

No.	Statements	Means	SDs
16.	Teaching English grammar by using English makes students get lost.	3.15	3.00
23.	Using code-switching is necessary to give instructions in grammar application.	3.4	3.16
28.	I feel uncomfortable when I talk to my students in English.	3.5	2.91
17.	Learning English grammar by using English itself is a waste of time.	3.95	5.70
	Total of Means	3.5	
	Total of Standard Deviations	3.69	

Table 5 shows the means and standards deviations for participants' responses of agree to the items (16,23,28, and 17) of the questionnaire. In addition, the means and standard deviation were calculated and displayed in charts using Microsoft Excel 2016 for the above tables (table 3, 4, and 5).

Research Questions

The researcher is studying the use code-switching in teaching English grammar from teachers' perspectives at secondary school level, since the use of code-switching is a controversial issue for many researchers. This study aimed to answer the following question:

Main question:

> ➢ What are the attitudes of teachers toward using code-switching in teaching English grammar at secondary school level?

Sub questions:

> ➢ To what extend the use of Arabic language considered the best direct method to teach English language in class?

> ➤ Is there any reason to use code-switching when using English language grammar?

Discussion

The present study investigated teachers' attitudes towards using code-switching in teaching English grammar in public secondary schools in Jerusalem. This chapter will scrutinize the results of the data analysis for the research question of this study which is: What are the attitudes of teachers toward using Arabic in teaching English grammar at secondary school level?

> ➤ What are the attitudes of teachers toward using code-switching in teaching English grammar at secondary school level?

Table 3 above shows the means and standards deviations for participants' responses of agree to the items of the questionnaire. The item number 19 in the questionnaire got the highest mean, which means that teachers think the use of target language in teaching grammar makes students think in English which make them more communicative in the target language. This imbedded *The Virtual position.* In supporting this idea, the participants for this questionnaire agreed that EFL teachers should speak English as much as possible and using code-switching should be minimized to the best of the teacher's ability while presenting grammar rules. On the other hand, students don't like teachers to use only the target language in teaching English grammar because students feel afraid to make mistakes, stressed, and uncomfortable when teachers use English only in grammar class. On the other hand, *the optimal position* showed in the questionnaire because the participants agreed that using code-switching is helpful for students in learning grammar rules when translating a difficult concept or idea. In supporting this, the participants agreed on that students can understand most of English rules when teacher switches language (using both English and Arabic). Moreover, some teachers use code-switching when they lack confidence in their own knowledge of English.

Table 4 above shows that the participants did not have a specific opinion in terms of whether they agreed on disagreed on the following: teachers use code-switching to increase students' understanding of grammar rules; teachers tend to use Arabic because they face problems in explaining things in English; Using only L2 in teaching English grammar has a negative impact on students' learning; students cannot understand all rules of English grammar when using only English in grammar class; code-switching is indispensable in teaching English grammar in primary classrooms; The amount of English that teachers use depends on their educational qualifications; using Arabic should be stopped in grammar class; using code-switching in English classes should be recommended by the educational authorities; Arabic can be used to help students improve their grammar proficiency; teachers find using code-switching in grammar class is boring.

Table 5 above shows that the participants on this questionnaire disagreed on that teaching English grammar by using English makes students get lost. On the other hand, the use of code-switching in teaching English grammar is necessary to give instructions in grammar application. Moreover, the participants agreed on that talking only in English with their students doesn't make them feel uncomfortable. Finally, the participants disagreed on that learning English grammar by using English itself is a waste of time, which means the use of the target language in teaching English grammar is helpful for students.

> ➤ To what extend the use of Arabic language considered the best direct method to teach English language in class?

The study revealed that relying heavily on the mother tongue in the EFL classroom will deprive the students of being exposed to English to learn more and better. This supports the belief of the maximal position that using code-switching might be harmful for the students' learning process since it reduces their opportunities for using the target language. Since most of the teachers agreed that the use of code-switching in teaching English grammar will make them think in the mother tongue. The researcher has found that findings of this study is in harmony to a great extent with (Alshehri, 2017).

➢ Is there any reason to use code-switching when using English language grammar?

The study also indicated that the code-switching was commonly used in the EFL classroom, for a range of purposes and with varying degrees of frequency. Seventy percent of the teachers wrote in the free-response questions that teachers should use code-switching in teaching grammar in order to make the topic clearer this support the optimal position, for example, in teaching tenses and highlighting the differences between them, in teaching new concepts, and explaining difficult ideas. The results of this study are in accordance with earlier studies (e.g. Alshehri 2017, Auerbach, 1993 and Nation, 2003). The purpose of that is expressing students' ideas with no linguistic barrier.

Conclusion

The teaching of English as a foreign language in class has always been debated about. Whereas some believe that English language should be used only in class to improve the students' skills, others think that Arabic should be included for the main goal in teaching is the student, and the best methods possible should be used in conveying and illustrating English comprehension texts, grammar, exercises and speaking and writing skills. Regarding English as the first main wide-spread language in the world, still many people consider it as a difficult language to learn. This stereotype of thought has a negative impact on our students in schools in general.

English teachers find it so hard to depend only on English language in teaching Arab students. This is due to most students do not really comprehend English language very. Teachers of English as a foreign language find difficulties teaching English without referring to the mother tongue in some aspects. They also state that their students encounter many problems comprehending English as a foreign language with the use of mother tongue by their teachers in a classroom setting. This indicates that both learners and teacher learning of English as a foreign language is difficult to learn without using the mother tongue in the classroom setting.

Recommendations

The issue which we should focus on is the student, for he/she is the recipient. We should set a main goal for every English class, which is the best way to teach this and how a teacher can convey this to my student. If the main goal is set, everything in class will turn good. But if a teacher enters a class, not knowing what to do, where to start from or how to teach, then be certain that you have come to a serious problem. Including Arabic in English classes, as I think, is not a mistake. It eases the atmosphere for students to learn and comprehend better. But we should not depend totally on Arabic language only. There should be a mix of both. We do not want to ignore the idea that the class is called an "English class" and the aim of it is to help students in acquiring it as much as possible. To sum up, employing Arabic as a facilitating tool in English classes has gained so much attention in schools. This paper has attended to investigate the opinions, attitudes and solutions of this issue amongst teachers and students.

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Investigation of Metacognitive Reading Strategy Use for Items Constructed at Different Cognitive Processes

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Abstract

Reading comprehension is very important for students as it is what they need throughout their whole life to meet certain standards socially and academically. In the literature, some research has investigated the relationships between reading comprehension and metacognitive strategies. This study aims to reveal whether students use different metacognitive strategies in their reading comprehension skills at different cognitive levels (focusing on and retrieving explicitly stated information, making straightforward inferences and evaluating and criticizing the content and textual elements). The study group consists of 69 seventh grade students. Reading comprehension test, rubric, and Metacognitive Reading Strategies Scale were used to collect data. Crosstabulations were created in the data analysis, which revealed that the metacognitive reading strategy was the most frequently used strategy, while answering the items at all cognitive levels is the problem-solving based reading strategy. Students' strategy use varied by their inexperience in using strategies, their low performance in reading comprehension success, or their unawareness of metacognitive strategies. The results were discussed in light of the studies using the same measurement tool and investigating metacognitive reading strategies and reading comprehension.

Key Words: Meta cognitive strategies, reading comprehension, reading strategies, achievement test.

Introduction

While reading was defined by Akyol (2007) as the process of structuring knowledge for a specific purpose with the help of prior knowledge and constructing meaning, Demirel (1999) argued that reading is the process of making meaning out of written symbols with the cooperation of cognitive processes and psychomotor skills. Reading comprehension skill is formed as a result of a process and is one of the first steps for individuals to acquire knowledge. This skill is the most basic skill required for many needs of individuals such as their personal lives and professional education, self-realization, evaluating social events, establishing relationships and conveying their thoughts. Mete (2012) underlines that reading is a measure of civilization both at the individual and social level. Mullis, Martin, Kennedy, and Foy (2007), on the other hand, emphasize that the reading comprehension skill will be beneficial for the individual in increasing the success of the individual in daily life, providing intellectual accumulation and discovering the individual's potential.

Metacognitive reading strategies are defined as strategies that help individuals regulate and monitor their cognitive strategies (Ahmadi, Ismail, & Abdullah, 2013). Readers who are conscious of reading comprehension and who have acquired/discovered the knowledge of how to read in order to understand it in the best way, approach the text more consciously in order to facilitate their ability to evaluate and critique the content and textual elements in the comprehension process. It is known that they prepare some cognitive strategies in advance to cope with the comprehension barriers they think they will encounter in the text (Karatay, 2010). Zhang, Gu, and Wu (2008), metacognitive awareness in reading practices; They expressed it as including the readers' conscious awareness of the strategic reading process, the vocabulary of reading strategies, and the highest level and correct use of strategies in understanding the text. Readers with high metacognitive awareness choose reading strategies related to reading purposes in the reading and comprehension process. They follow the understanding process, effectively evaluate the strategy they have chosen, and change their strategy when they need to. In the process of reading and meaning-making, if the individual knows and applies reading strategies, meaning-making increases.

Today, schools do not only aim to make individuals literate. Schools should ensure that their students understand and perceive the world correctly and demonstrate high-level skills that will help them perceive the world. Knowing a piece of information and using that information effectively are quite different things. The important thing is to use the information effectively. In this respect, it is very important for the individual to know the strategies used in understanding the text he read and to use this knowledge in the process of reading comprehension.

Metacognitive reading strategies are to consciously follow the reading process, intervene when necessary, and evaluate the process in all its aspects in order to create meaning (Başaran, 2013). Beyond cognition, which is briefly expressed as "thinking to think" or "learning to learn", it is essential for the individual to evaluate his/her own learning process. Therefore, in this assessment, the individual's learning tasks and what kind of knowledge and skills this requires should be properly comprehended. At the same time, metacognition is intertwined with the ability of an individual to make correct inferences about how to apply his or her own strategic knowledge in a certain situation and how to use this strategy efficiently (Melanlıoğlu, 2011).

Mokhtari and Reichard (2002) mention three basic processes of metacognitive reading strategies as holistic reading strategies, problem solving strategies and supportive reading strategies. Holistic reading strategies involve readers establishing

reading intent, activating their prior knowledge, making predictions about the text, verifying their predictions, reviewing the text, scanning the text to determine its type, making use of the clues and structure of the text, and using other textual features to enrich reading comprehension. Problem solving strategies include reading slowly and carefully, adjusting reading speed, rereading, visualizing the information read, reading aloud, and inferring the meanings of words. Supportive reading strategies, on the other hand, include the reader taking notes while reading, expressing what he has read with other words, underlining, asking himself questions, discussing and summarizing the subject with others.

Muhid, Amalia, Hilaliyah, and Wajdi (2020) studied the relationship between metacognitive strategies and reading comprehension achievement with high school students. According to the findings of the study, the use of metacognitive strategies positively affects students' reading comprehension success. In other words, students who use metacognitive strategies effectively have higher scores in the reading comprehension achievement test. In their study, Wu, Valcke, and Van Keer (2019) examined student and grade level variables that are effective in student achievement, and revealed that the two features most associated with secondary school students' reading success are students' use of metacognitive strategies and their autonomous reading motivation. Ghaith and El-Sanyoura (2019) revealed that program solving strategy, one of the metacognitive strategies, has a positive and significant relationship with high-level understanding.

Based on the points explained and discussed in the literature, it is deduced that the process of answering the items written at different cognitive levels completely and correctly depends on the reading of the text on which the item is based, in a way that reveals the feature measured by the item. The use of metacognitive processes, which take an active role in reading and comprehension processes, is related to the strategies individuals use while reading the text. Considering all these, the questions sought to be answered by this research are as follows:

- What is the distribution of students' metacognitive reading strategies used for answering the item measuring focusing on and retrieving explicitly stated information?
- What is the distribution of students' metacognitive reading strategies used for answering the item measuring making straightforward inferences?
- What is the distribution of students' metacognitive reading strategies used for answering the item measuring evaluating and criticizing content and textual elements?

Method

Research Design

This study aims to examine how the metacognitive strategies used by students to answer open-ended items in the field of reading comprehension written at different cognitive levels are distributed according to how accurately students answer the item. It is a survey research that aims to describe a situation that has happened in the past or that still exists (Creswell, 2009).

Study Group

The study group consists of 69 seventh grade students studying in Mamak district of Ankara province in the fall semester of 2019-2020 academic year. The convenience sampling was used as the sampling method. In convenience sampling, the researcher creates the sample starting from the most accessible respondents until he or she reaches a large group he/she needs (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz,

& Demirel, 2014). Convenience sampling prevents the loss of time, money and labor, but interpreting the results must be performed very carefully.

Data Collection Tools

Reading comprehension achievement test, rubric, and Reading Strategies Metacognitive Awareness Inventory were used to collect data in the study.

The reading comprehension achievement test consists of a reading text and three open-ended items based on the reading text. The text used is the 'Obesity' text used in the PISA 2012 application, which is an international large-scale assessment. The text was chosen considering its suitability for real life. The items prepared based on the text were prepared at three levels using the PIRLS reading skill classification. These are focusing on and retrieving explicitly stated information, making straight forward inferences, and evaluating criticizing the content and textual elements. When the relevant levels are examined, it is seen that the focus is on the student's ability to recognize the information or idea that is related to the answer of the item when the items measures the focus on and retrieve explicitly stated information. This process requires no interpretation. What is expected from the student is to distinguish the targeted information/idea from the others in the text. In measuring the cognitive process of making straightforward inferences, the focus is on finding information and ideas and combining what they find. Relationships, information, or ideas are not presented directly to the reader, but a skilled reader will relate and sequence them in his own mind as he reads. The process of examining the elements, content and language of the text, which is the most complex reading comprehension level, is based on the student's examination of the relevant text from his own point of view (worldview, belief, knowledge, etc.) and making inferences and interpretations about this text when necessary. In this process, which represents the highest level of reading comprehension skill, the student can evaluate the quality of the text, the event described in the text or the author's point of view by using their own knowledge. (Mullis, Martin, Gonzales and Kennedy, 2003).

A directive was prepared for each form describing the purpose of the research and what is expected from the students. The selected text, prepared items and instructions were sent to two assessment and evaluation experts and two Turkish teachers with secondary school experience. The formed expert group was asked to examine the items in terms of intelligibility, suitability for the grade level, word choice, and the appropriateness of the text to the grade level, as well as measuring the grouped reading comprehension levels of the items. According to the feedback from the expert group, the text, instructions and items were revised and the achievement test was made ready for application. The descriptive statistics of the scores obtained by the students from the achievement test are given in Table 1.

Table 1

Descriptive Statistics for the Total Score of Achievement Test

	focusing on and retrieving explicitly stated information	making straightforward inferences	evaluating and criticizing content and textual elements	Total score
$\bar{x}$	7.19	4.87	5.77	17.83
Median	7	4	7	18
Mod	10	7	10	21
Ss	2.94	3.27	3.65	7.44
Minimum	0	0	0	0
Maximum	10	10	10	30
Range	10	10	10	30

According to Table 1, students generally performed above the average. The average score they got from the level of focusing on and retrieving explicitly stated information, which is the most basic level of reading comprehension, is considerably higher than the higher levels of making straightforward inferences and evaluating and criticizing the content and textual elements. In other words, the most easily answered item by students is the item at the simplest cognitive level.

A rubric was created to score the open-ended items in the prepared achievement test. The rubric was prepared with the most correct answer, far correct answers, blank answer and wrong and other answers subsections. Identification codes were used for the responses. Each item was evaluated out of 10 points. The prepared rubric was sent to three assessment and evaluation experts, and the rubric was finalized in line with the feedback received from the experts.

The last data collection tool, Reading Strategies Metacognitive Awareness Inventory, was developed by Mokhtari and Reichard (2002) and adapted into Turkish by Öztürk (2012). This inventory has a 5-point Likert-type rating of (1) Never (2) Rarely (3) Often (4) Often, and (5) Always. All items have been preserved during the adaptation phase. As a result of the analysis of the three factors in the original scale, the eigenvalue of the first factor was 9.67 and the variance it explained was 32.26%; The eigenvalue of the second factor was 1.74, the variance explained was 5.8%, the eigenvalue of the third factor was 1.36, and the variance explained was 4.54%. The total eigenvalue of the scale is 12.87 and the total variance explained is 42.6. The three-factor structure in the original scale preserved itself when applied to students in Turkey. Among the three factors in the scale structure in Turkish culture, the "supporting reading strategies" factor is the third factor in the original scale, the first factor in the Turkish form, the "problem solving strategy" factor is the second factor in the original form and the second factor in the Turkish form, and the "general reading strategy" factor is the first factor in the original form, and the third factor in the Turkish form. In addition, was found as while the 2nd item in the scale was in the factor of supporting reading strategies in the original form, it was in the general reading strategy factor in the Turkish form, and the 26th item in the general reading strategy factor. Except for these differences, all items were found to be compatible with the sub-factors in the original scale, but the order of only two sub-factors was changed. The Cronbach Alpha coefficient was calculated for the total score reliability of the Reading Strategies Metacognitive Awareness Inventory, and it was found to be α=0.91. When the reliability of the sub-dimensions of the scale was examined, it was seen that the reliability of the Supporting Reading Strategies sub-dimension was α=0.71, the reliability of the Problem-Solving Strategy sub-dimension α=0.74, and the reliability of the General Reading Strategy sub-dimension α=0.82.

Data Collection

The data were collected by the researchers from seventh grade students studying at a public school in Mamak. After obtaining permission from the school principal and course teachers, the researcher entered the classrooms. A brief summary of the study was made for students on the first day of classes. Parental consent forms were distributed to students. After obtaining permission from the parents of the students, the data collection process was started. Both text and text-based questions and three Reading Strategies Metacognitive Awareness Inventory were distributed to each student in each class. The logic of answering the questions used in PIRLS was explained to the students and the purpose of this study and the starting point of the idea were explained. Accordingly, the complete and correct answer to each question they are about to answer includes reading the text for different purposes; For this reason, it was mentioned that the strategies for reading the text were predicted to change while answering each question. In summary, after each student answered the

first question, they filled the first metacognitive awareness inventory, and they filled the second metacognitive awareness inventory after answering the second question, and the last metacognitive awareness inventory after answering the last question.

Data Analysis

The data were analyzed by using the SPSS 22.0 package program. Response recognition codes of the students were recoded as 2 for the most correct answer (response recognition code 10), 1 for far correct answers (response recognition codes 13, 17 and 20), and 0 for incorrect and unrelated answers (response recognition codes 30 and 40). Scores from each sub-dimension of the inventory were calculated separately for the first, second and third items. Since each sub-dimension has a different number of items, the mean scores of the sub-dimensions were calculated in order to make comparisons between the sub-dimensions possible. For each item, the distribution of metacognitive strategies used by those who answered the item most correctly, those who answered it far right, and those who gave incorrect or unrelated answers were examined with cross tables.

Findings

In this section, the findings related to the first, second and third research questions are given, respectively.

Findings regarding the First Research Question

The distribution of metacognitive reading strategies used for answering the first research question, focusing on and retrieving explicitly stated information item, to student response recognition codes was examined with cross-tables and given in Table 2.

Table 2

Distribution of metacognitive strategies used to answer the items measuring focusing on and retrieving explicitly stated information process

	Supporting Reading Strategies sub-dimension	Problem solving strategy sub-dimension	General reading strategy sub-dimension	Total
The most correct answer	1	24	3	28
Partially correct answers	3	29	6	38
Incorrect/Unrelated answers	0	3	0	3
Total	4	56	9	69

When Table 2 is examined, 41% of the group gave the most correct answer to the item of focusing on and retrieving explicitly stated information; 55% gave partially correct answer and 4% gave an incorrect or unrelated answer. 85% of the students who gave the most correct answers, 76% of the students who gave the partially correct answer, and all of the students who gave incorrect or unrelated answers used the problem-solving strategy the most when answering the item. The second most used strategy was general reading strategies for each response category, while the least used strategy was supporting reading strategies.

Findings regarding the Second Research Question

The distribution of metacognitive reading strategies used to answer the second research question, making straight forward inferences item, to student response recognition codes was examined with cross-tables and given in Table 3.

Table 3

Distribution of metacognitive strategies used to answer the items measuring making straightforward inferences process

	Supporting Reading Strategies sub-dimension	Problem solving strategy sub-dimension	General reading strategy sub-dimension	Total
The most correct answer	1	7	3	11
Partially correct answers	7	33	9	49
Incorrect/Unrelated answers	3	2	4	9
Total	11	42	16	69

When the metacognitive strategies used for answering making straightforward inferences item are examined in Table 3, it is seen that the strategies based on problem solving are the most frequently used strategies. It was determined that 64% of the 11 people who gave the most correct answers and 67% of the 49 people who gave partially correct answers used reading strategies based on problem solving; additionally, about half of 9 people who gave incorrect or unrelated answers used general reading strategies. The second most used strategy is general reading strategies while supporting reading strategies was used the least frequently.

Findings regarding the Third Research Question

The distribution of metacognitive reading strategies used to answer the item, evaluating and criticizing content and textual elements item, was examined with cross-tables and given in Table 4.

Table 4

Distribution of metacognitive strategies used to answer the items measuring evaluating and criticizing content and textual elements process

	Supporting Reading Strategies sub-dimension	Problem solving strategy sub-dimension	General reading strategy sub-dimension	Total
The most correct answer	7	13	2	22
Partially correct answers	11	22	5	38
Incorrect/Unrelated answers	2	6	1	9
Total	20	41	8	69

Table 4. Distribution of metacognitive strategies used to answer the items measuring evaluating and criticizing content and textual elements process

When the metacognitive strategies used in the evaluating and criticizing the content and textual elements are examined in Table 4, it is seen that the problem-solving

strategy is the most frequently used strategy as happened in other cognitive processes. 59% of the group that gave the most correct answer, 58% of the group that gave the partially correct answer, and 67% of the students who gave incorrect or unrelated answers used problem solving strategies. The order of metacognitive strategies used in the question of evaluating and criticizing content and textual elements differs from the strategies in other cognitive processes. While problem solving strategies are used most frequently, it is seen that reading support strategies are used in the second place and general reading strategies are used in the last place for the evaluating and criticizing content and textual elements process.

Results

In this study, the cognitive level distribution of metacognitive strategies used by 7th grade students was examined. The results showed that the distribution of metacognitive strategies used by 7th grade students did not differ greatly according to the cognitive level of the questions they answered based on the text. In all of the items of focusing on and retrieving explicitly stated information, making straightforward inferences and evaluating and criticizing the content and textual elements, the most used metacognitive reading strategy was determined as the strategies based on problem solving. In the cognitive levels of focusing on and retrieving explicitly stated information, it was seen that the most used metacognitive answering strategy in all response categories was problem-solving strategies, and the second most used strategy was general reading strategies. In the item of evaluating and criticizing the content and textual elements, which is the highest cognitive process, the slightly different distribution revealed. While the most frequently used metacognitive reading strategy was a problem-solving strategy, the second most frequently used strategy was to support reading strategies. The results obtained by Ateş (2013) show parallelism with the results of this research. Ateş revealed that students' reading strategies and their use of general reading strategies were at a moderate level, and their use of problem-solving strategies was at a high level. Meniado (2016), in his study examining the relationships between metacognitive reading strategies, motivation and reading comprehension, concluded that the most used metacognitive reading strategy is the problem-solving strategy.

It was thought that the students' frequent use of the problem-solving strategy, one of the metacognitive reading strategies, within the scope of this study may be related to the repetitive and slow readings of the related strategy. It is known that Turkish students rank very low in reading and reading comprehension in national and international large-scale evaluation results. The result of this situation may be that the student who cannot read well and cannot understand what he reads, tries to make sense of the text by reading intensively and at varying speeds as a reading strategy.

Another reason why metacognitive reading strategies do not differ according to cognitive levels may be that students are cognitively ignorant of the strategies they use or that they do not have awareness of metacognitive strategies. Even if the student has no education about the learning process and how he learns, has no knowledge of what the reading strategies are, or even if he has a strategy, the correct answer to the multiple-choice items used in the continuous measurement is so independent of the strategy that the student's knowledge and knowledge of his own cognitive and metacognitive processes may be far from an effort to improve monitoring.

The study has some limitations. The first of these is related to the representativeness of the selected sample from the universe. Generalizability of the results can be increased by repeating this study with a larger group. Another suggestion might be

to measure with more items. Due to time and application limitations, the achievement test, which is one of the data collection tools, was composed of only three items. More data on the relevant cognitive level can be collected by sampling more of each cognitive level. The last suggestion is about students' use of metacognitive reading strategies. The orientation towards the same reading strategy at different cognitive levels raises questions about how effectively students use metacognitive strategies. Introducing metacognitive reading strategies, which are an important pillar for supporting and improving reading comprehension, and encouraging students to use different strategies will positively affect the cognitive duration of reading comprehension in the classroom.

Ethical compliance statement

In all the research processes of the article, the author acted in accordance with the principles of universal research and publication ethics.

Declaration of Conflict of Interest

The author declares no conflict of interest.

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Appendixes

Appendix A: Achievement Test

Değerli Öğrenci,

Aşağıdaki 'Obezite' isimli metni ve metne dayalı yazılmış üç açık uçlu soruyu bulacaksınız. Lütfen metni okumadan önce araştırmacının yapacağı açıklamayı dikkatlice dinleyiniz.

Elde edilen veriler yalnızca araştırma amacı ile kullanılacak olup kimseyle paylaşılmayacaktır. Verdiğiniz destek için size çok teşekkür ederim.

BASINDA OBEZİTE

10.01.2015

12 Yaş Altı Çocuklarda Mobil Cihazların Kullanımının Yasaklanması İçin Bir Sebep: Obezite

Video oyunları ve televizyon, obezitenin artması ile ilişkilidir. Odasında bu tür cihazları kullanmasına izin verilen çocuklarda obezite görülme sıklığı %30 oranında artmaktadır. Obez olan çocukların %30unda diyabet ortaya çıkmakta, kalp ve erken felç riski artmakta ve ortalama yaşam süresi kısalmaktadır.

15.12.2014

Çocukluk Döneminde Risk: Obezite

Anne ve babanın obez olması, çocuğun yemek alışkanlığı bakımından anne ve babasını örnek alması, çocukların televizyon ve bilgisayar başında çok zaman geçirmesi, stres, kaygı gibi unsurlar çocukluk dönemine obezitenin oluşmasına neden olmaktadır.

10.11.2014

Çocukları Obez Olan Ailelere Para Cezası Geliyor!

Porto Riko'da hükümet, obeziteyle mücadele amaçlı, çocukları fazla kilolu olan anne ve babalara 800 dolara kadar para cezası verilmesini planlıyor. Gelecek nesillerin daha sağlıklı olması için bu uygulamanın yararlı olacağını düşünenlerin sayısı ülkede oldukça fazla.

Appendix B: Items and Rubrics

1. Metne göre obezitenin sebepleri nelerdir? Maddeler halinde yazınız.

Tanıma Kodu	En Doğru Yanıt	
10	Öğrenci, obezitenin en az dört sebebini yazar.	10
	Uzak Doğru Yanıtlar	
13	Öğrenci, obezitenin en az üç sebebini yazar.	7
17	Öğrenci, obezitenin en az iki sebebini yazar.	4
20	Öğrenci, obezitenin en az bir sebebini yazar.	2
	Yanlış Yanıtlar	
30		0
	İlişkisiz Yanıtlar	
40		0

2. Gazetelerde obeziteyle ilgili haberlere sıklıkla yer verilmesinin nedeni nedir? Cümleler halinde yazınız.

Tanıma Kodu	En Doğru Yanıt	
10	Öğrenci, gazetelerde obeziteyle ilgili haberlere sıklıkla yer verilmesinin üç nedenini yazar.	10
	Uzak Doğru Yanıtlar	
13	Öğrenci, gazetelerde obeziteyle ilgili haberlere sıklıkla yer verilmesinin iki nedenini yazar.	7
17	Öğrenci, gazetelerde obeziteyle ilgili haberlere sıklıkla yer verilmesinin bir nedenini yazar.	4
20	Öğrenci, genel bir yanıt yazar.	2
	Yanlış Yanıtlar	
30		0
	İlişkisiz Yanıtlar	
40		0

3. Metinde obezitenin önüne geçmek için farklı öneriler yer almaktadır.

Siz bu önerileri haklı buluyor musunuz? Düşüncenizi gerekçeleriyle birlikte cümleler halinde yazınız.

Tanıma Kodu	En Doğru Yanıt	
10	Öğrenci, metinde verilen önerinin mantıklı ya da mantıksız olduğunu kendi bakış açısıyla eleştirel olarak tartışır.	10
	Uzak Doğru Yanıtlar	
13	Öğrenci, metinde verilen önerinin mantıklı ya da mantıksız olduğunu belirtir. Kendi bakış açısına yer vermez.	7
17	Öğrenci, kendi önerisini söyler ancak metinde verilenleri eleştirmez.	4
	Yanlış Yanıtlar	
30		0
	İlişkisiz Yanıtlar	
40		0

Investigation of Secondary School Students' Scientific Research Levels with Social Studies Course Content

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Abstract

Scientific research is an activity in which scientific procedures are used to test and evaluate theories in a systematic manner for specified aims. In this regard, it is critical to ascertain secondary school students' thoughts, attitudes, and scientific research levels regarding scientific research activities. The goal of this study is to determine the scientific research levels of secondary school pupils. Structured interview technique was used in this research, which was conducted with qualitative research method. The study group for this phenomenology-based research consisted of two secondary schools in Diyarbakr during the 2021-2022 academic year. The study group determined by the convenient sampling method is 65 people. In this study, the scientific research level determination form developed by the researchers was used as a data collection tool. The descriptive content analysis was used to examine the data in the research form. According to the study's findings, 5-7th grade students' scientific research levels were pretty near and high. The class with the highest level of scientific research is the seventh grade, while the lowest is the fifth grade. It is advised that secondary school students develop their skills in generating a references, drafting a research report, displaying in-text references, establishing the importance of the research, and testing research hypotheses.

Keywords: Social studies, Scientific research level, Secondary school, Student.

Introduction

Research may be defined as an activity in which scientific procedures are not frequently used and is carried out for a variety of reasons such as gathering information, learning, or investigating any subject. Doing research entails developing a solution to an issue and thinking about a subject in order to comprehend it. In other terms, research is the endeavour made by the researcher to gather knowledge when he/she feels the need for information on a subject (Usta, 2011). According to the Turkish Language Association's Contemporary Turkish Dictionary (TDK, 2023), research is "methodical study and research on science and art." In this sense, research is a tool or approach that individuals often utilise to get knowledge and comprehend the truth (Çalışkan, 2008).

Scientific research would be more accurately defined as a field of competence in which scientific procedures are applied systematically and ideas are tested and assessed for specific reasons. Although the term research is most commonly associated with scientific study, the idea of scientific research has been articulated in a variety of ways across the literature (Beisenbayeva, 2017). Scientific research, for example, is defined by Bahadır and Tuncer (2017) and Özdamar (2003) as the intentional application of scientific procedures to a subject; Sever, Öncül, and Ersoy (2019) defined it as a talent that evolves methodically and necessitates experience. Similarly, the term science is viewed differently and extensively in our day and age (Lamanauskas & Augiene, 2011). In this context, it is generally accepted that scientific research is conducted not only in the disciplines of science, medicine, and mathematics, but also in a wide range of social sciences.

Scientific research is as significant in the Social Studies Curriculum (SSC) as it is in the science and mathematics curriculums. In reality, scientific research activities were included into the learning domains, course material, and acquisitions of SSC. Children are offered numerous scientific research challenges and their inquisitive, scientific, and exploratory qualities are developed in this manner. In this regard, there are various research processes that youngsters must take when conducting research in social studies classes. It is essential to follow the scientific research processes and respond accordingly (Sakallı, 2022). It's been interesting to see how far secondary school pupils can take scientific research stages (Erdal, 2020). As a result, using inquiry-based education in social studies courses not only allows students to face challenges, but also gives them the opportunity to address these problems. Students must make an effort not just to study existing material, but also to search for and find it (Taş, 2014). Indeed, when experiencing science or devising a solution to a problem, children observe and make predictions, engage in collaborative dialogues with their instructors and classmates, and think flexibly while planning and doing research to answer their concerns (Bustamante et al., 2018). In this regard, students should be provided opportunities to learn through participating in scientific research (Edelson et al., 1999). Based on these explanations, it is vital to correctly express and educate students what scientific research is before teaching how to perform scientific research in the social studies course.

Scientific research is defined as "the examination, collection, evaluation, interpretation, and reaching of all kinds of information for the solution of problems determined by curiosity, research, and learning desire" (Dilbaz et al., 2012). In this regard, scientific research may be defined as a research activity in which particular hypotheses are investigated and assessed using certain criteria. It can be claimed that scientific research and research abilities are valued in SSC; the value of being scientific is represented in the textbooks When SSC was examined, it was seen that

steps, subjects and achievements related to scientific research were included in the 4th-7th grades. "Research, communication, and observation" have been identified as SSC's fundamental competencies. There are also suggestions for acquiring "research" skills under the unit headings of SSC (Ministry of National Education (MNE) SSC, 2018). As a matter of fact, the skills of "observation, drawing and interpreting tables, graphs and diagrams, and communication" included in the 2018 SSC are among the scientific process skills (Yeany et al., 1986; Germann et al., 1996). According to Turan (2019), scientific research activities that examine research steps and principles are used in some learning areas of SSC. In this respect, it can be said that it is very important for secondary school students to use scientific research steps with social studies course content in terms of scientific process skills and practices. Scientific process capabilities and scientific applications are significant instruments for creating and organising knowledge about our surroundings (Ongowo, 2017). According to Barr (1997), in an effective social studies instruction, pupils should not only be engaged in learning facts, but should also gather and digest factual knowledge as necessary. The crucial component here is to select and perform scientific research that is appropriate for the children's age, development, grade level, and readiness level, and that will catch the students' interest and engage their sense of curiosity. Teachers, as curriculum implementers, have key responsibilities in developing children's scientific research abilities and levels.

One of the most essential tasks of teachers should be to teach pupils about the nature of scientific research, regardless of the sort of study. As a result, rather than only the sort of study, the student's features and levels should be taken into account. Forcing a low-level student to conduct high-level study may lead to the student developing unfavourable attitudes towards scientific inquiry. As a result, when students are required to do scientific study, research themes appropriate for their level should be identified (Erdoğan, 2018). It is required to conduct some studies and activities for the development of scientific research abilities in children from an early age in order to achieve this. All children should be given the opportunity to participate in and benefit from a variety of experiences, as differences in children's development and learning process are significant in the early years (Miller at al., 2006).

Although people who conduct scientific research should be knowledgeable and have some superior qualifications (Kurnaz et al., 2021), children are not an empty vessel; they want to create their own thoughts and ideas; our responsibility is to develop children's existing skills and understandings, as well as their attitudes and skills, and to offer new opportunities that are interesting to them (Duffy, 2006). Because children are naturally creative and interested, practises and activities that foster children's scientific creativity should be incorporated into the educational process beginning with pre-school education (Siew et al., 2017). In this way, teachers should provide students with an environment that will reveal and develop their scientific creativity (Aruan et al., 2016; Hadzigeorgiou et al., 2012). In this respect, one of the most important aims of education should be to raise scientifically literate individuals from the lowest level of primary education, and to make all individuals of the society reach a level that can adapt to scientific and technological developments (Tunç-Şahin & Say, 2010). Therefore, within the scope of 21st century skills, the important element for students is not knowledge, but the fact that students are active while using this information and can find solutions to real-life problems (Çiftçi at al., 2021). Students' scientific research develops many high-level thinking skills such as inquiry, research, critical thinking, problem solving and decision making (Erdal, 2020). In this regard, it is critical to provide students with problems based on scientific research steps in social studies lessons, as well as to carry out some practises and activities that will improve their scientific research level and skills, beginning at a young age.

The primary objective of this research is to determine the scientific research levels of secondary school students by using the social studies course content and scientific research steps developed by researchers in accordance with the literature. Researchers initially evaluated several scientific research techniques publications in the literature while producing the scientific research level determination form (Balcı, 2009; Büyüköztürk et al., 2011; Creswell, 2003; Çepni, 2007; Ekiz, 2003; Karasar, 2017). Using these sources, the researchers determined the information about what should be considered in scientific research. Later, the researchers examined the learning area, achievement and course content related to scientific research in SSC (2018) and 5th-7th grade social studies textbooksThe study's goal is to determine the students' scientific research levels using scientific research stages coupled with social studies course material. Secondary school students' talents such as questioning, research, critical thinking, problem solving, and decision making may be measured by determining their scientific research levels. As a result, this research is critical in identifying pupils' higher-order thinking skills. Because someone who will conduct scientific research must be able to think critically, scientifically, and creatively, make logical inferences, and solve problems (Balcı, 2009; Çepni, 2007; Karasar, 2017; Büyüköztürk et al., 2011).

In order to develop students' perceptions of science, their ideas about scientific research activities should be learned and their application skills should be developed (Lederman & Lederman, 2005). Scientific and Technological Research Council of Turkey (TÜBİTAK) organizes scientific research projects competitions in our country every year in order to realize the scientific research skills of secondary and high school students. Thanks to these competitions, students have the opportunity to develop their scientific research skills. Therefore, applications and activities that encourage children's scientific creativity should be included starting from pre-school education (Siew et al., 2017). As a matter of fact, scientific applications are important tools to produce and organize information about the world around us (Ongowo, 2017). Studies covering this research in the literature (Elbay, 2020) are quite limited. Therefore, this research can make important contributions to the field of social studies education. Based on the results of this study, by determining the scientific research level of the social studies course content of the secondary school students, some arrangements, changes and updates regarding the scientific research steps can be made, and it can be ensured that the students conduct more qualified scientific research. In this respect, it is possible to say that this study is a very original research in the field of social studies education. In this direction, answers to the following research questions were sought within the scope of this research.

➢ What is the scientific research level of 5th, 6th and 7th grade secondary school students in line with scientific research steps?

➢ What is the comparative level of scientific research of 5th, 6th and 7th grade secondary school students in line with scientific research steps?

Methodology

Research Design

This study was carried out with the qualitative research method. In studies conducted with qualitative research methods, there is an effort to reach an in-depth understanding of the subject examined (Karataş, 2015). Therefore, this study was carried out as a qualitative research. In this study, a structured interview was conducted with the participants. In this respect, this research is in the pattern of phenomenology. Interview is the activity of expressing the feelings and thoughts of

the participants on a certain subject (Yıldırım & Şimşek, 2008). In order to determine the scientific research levels of the participants in detail, the structured interview technique was applied in this study. The structured interview was conducted by one of the researchers in the classroom environment of the participants during one class hour (40 minutes). With the interview technique, it is aimed to reach various unobservable data such as the attitudes, experiences, intentions, thoughts, comments, mental perceptions and reactions of the individual regarding the researched subject (Sönmez & G. Alacapınar, 2020).

This research was carried out in the second semester of the 2021-2022 academic year. It was done right after the "science, technology and society" unit was taught in 5th grade social studies lesson. Although, in SSC, only the 6th grade "SB.6.4.3. It conducts research using scientific research steps." When the 5th grade social studies textbooks are examined, the subject "scientific research steps" is directly addressed in this unit. Although it was not a direct subject of scientific research steps in the seventh grades, various subjects such as "scientific knowledge, the adventure of knowledge, scientists, scientific developments" were covered in the field of science, technology and society learning in the 7th grade. Additionally, the subject of scientific research steps was discussed in the 5th and 6th grades of the seventh graders. Therefore, since 7th grade students have some knoledge about scientific research steps, they were also included in this study. However, since there is no social studies course in 8th grade, students at this grade were excluded in the research. After science, technology and society units were taught, one of the researchers reminded students the scientific research steps in their classrooms in a class hour and completed the interview by giving information to the students about how to fill in the scientific research level determination form developed by the researchers.

Participating Groups

Participating group in this study was determined as two secondary schools, in the official education institution (Secondary School) where one of the researchers worked in the 2021-2022 academic year, and in another secondary school in the same province. The research group consisted of 320 students studying in these secondary schools. They were informed about this research, but 120 students accepted this research on a voluntary basis. However, since only 65 parents signed the consent form, this study was conducted on 65 students. The study group of this research was determined by convenient sampling method. Some of the participants (30 people) were in an official secondary school where one of the researchers worked, and the other part of the participants (35 people) was held in a public secondary school in the same district where the same researcher worked. The gender, grade levels and total number of the participants in this study are shown in Table 1.

Table 1

Distribution of participants by grade and gender

Class level	Gender		Total
	Female	Male	
5th grade	12	11	23
6th grade	12	10	22
7th grade	10	10	20
Total	34	31	65

As seen in Table 1, the participating group of the research consists of 5th-7th grade secondary school students, 35 of whom are female and 30 are male. 23 of the participants are 5th grade, 22 6th grade and 20 7th grade secondary school students. Participants in this study were coded as K1, K2, K3,............., K63, K64, K65.

Data Collection Tool

As a data collection tool in this research, the scientific research level determination form developed by the researchers in line with the literature (Balcı, 2009; Büyüköztürk et al., 2011; Creswell, 2003; Çepni, 2007; Ekiz, 2003; Karasar, 2017; SSC, 2018) and expert opinions. used. In this passpectve, in order to determine the scientific research levels of the students, the researchers first conducted a literature review in some databases (ERIC, Google academic, Researchgate, Turcademy, Web of Science, YÖK thesis). In the literature review; Publications on the concepts of "social studies, scientific research, scientific research level, scientific research steps, secondary school" were examined. Then, the researchers examined the 2018 SSC and social studies textbooks. The researchers decided that the "Science, Technology and Society" learning area in the 2018 SSC was suitable for this research. Because in this learning area, subjects such as "scientific research steps, scientific knowledge, scientists and scientific thought" are given more place. Then researchers examined the subjects related to scientific research in the "Science, Technology and Society" unit in the 5-7th grade social studies textbooks and determined the scientific research steps that were thought to be appropriate for the students and these steps were transformed into an application form. This form consists of three parts (directive, characteristics of participants, scientific research steps). In this direction, this form developed by the researchers was sent to two associate professors who are experts in social studies education for their evaluation. The scientific research level determination form developed by the researchers was arranged in line with the opinions and suggestions of the field experts and the form was finalized. Necessary information about the form developed to determine the scientific research levels of secondary school students is shown in Table 2.

Table 2

Scientific research level determination form

Scientific Research Level Determination Form
Dear student, the purpose of this research is to determine the scientific research level of secondary school students in social studies course. In this respect, we would like you to do a short research using the following research steps that you learned in the social studies class. The time to fill out this form in accordance with the beginning of the research is 30 days. Information on scientific research steps is given below. We wish you success.
Class : ( ) 5th grade ( ) 6th grade ( ) 7th grade   Gender : ( )Female ( )Male
Scientific Research Steps
1. Research Question-Problem: (As in the example, write any research question linked to your scientific research. For instance, how does the weather affect economic activity?
2. Hypothesis: (Create at least one hypothesis that is connected to your study issue. It is possible to write more than one hypothesis-hypothesis. For example, climate has a good impact on people's economic activity.)
3. Research Purpose: (In this part, write the goals of your research. You may have many research objectives. For instance, the goal of this study is to assess the impacts of climate on economic activity.)

4. Importance of Research: (In this part, explain why your research is important. For example, climate is one of the most important elements influencing agriculture, animal husbandry, and other industries. The sort of economic activity that may be carried out is influenced by the weather. This research is significant in terms of determining the impacts of climate on economic activity.)

5. Hypothesis Test: (In this part, please state if your research hypotheses are valid. For example, climate has a good or negative impact on people's economic activity.)

6. Research Report: (In this part, write a research report based on articles, encyclopaedias, books, journals, dissertations, or the internet that are relevant to your research topic and assumptions-hypotheses. Write the research findings you discover, together with in-text citations.)

7. References: (In this section, write your sources as you see in the course where or from whom you got the information you wrote in your research report).

One of the researchers explained this form, which was developed by the researchers in line with the literature and expert opinions, to the participants in a class hour. Answers were given to the questions of the students about this form and what to do during the application process was explained. The participants were advised that only they should fill out this form at the stage of filling out the scientific research level determination form. In this process, it was reminded that researchers can ask questions by reaching their e-mail addresses or phones when they encounter any problems. All students who accepted the application process were given an informed consent form to be signed by their parents. This research was conducted with 65 students who filled out the voluntary consent form. In addition, it was stated that the necessary information can be given to the participants who want additional explanations or have questions about this form, via e-mail or telephone. Students are given a maximum of 30 days to fill out this form in accordance with the scientific research steps. 65 participants who filled out the form sent this form to the researchers' e-mail address or phone within 30 days.

Validity and Reliability

In order to ensure that the information used in the scientific research level determination form applied to the participants in this study is reliable and valid, the researchers first collect the literature on SSC (Balcı, 2009; Büyüköztürk et al., 2011; Creswell, 2003; Çepni, 2007; Ekiz, 2003; Karasar, 2017; MNE, 2018). In the literature review; Publications on the concepts of "social studies, scientific research, scientific research level, scientific research steps, secondary school" were examined. Researchers then examined the content of scientific research steps included in social studies textbooks. Then, the researchers developed the scientific research level determination form in line with the relevant literature. In order for the scientific research level determination form developed by the researchers to be valid, the opinions of two field experts who are associate professors in the field of social studies education were consulted. After the opinions and suggestions of the field experts, the necessary arrangements were made and the scientific research level determination form was completed. Therefore, the researchers prepared a three-point Likert-type scale with the content validity of the form provided by the experts as "appropriate, partially appropriate and not appropriate". In this respect, in order to provide evidence for the validity and reliability of this form, a literature review was conducted by taking expert opinion. Then, the scientific research level determination form developed by the researchers in line with expert opinions was used. With the decision dated 08.04.2022 and numbered 101, the researchers got the necessary ethics committee permission from the Social and Human Sciences Ethics Committee of

Dicle University and entered the implementation phase. In this direction, only those whose parents filled in the informed consent form on a voluntary basis were included in the study.

Data Analysis

Two forms of analysis are performed on qualitative research data (content and descriptive) (Yıldırım & Şimşek, 2008). The data in the scientific research level determination form generated by the researchers and filled out by the participants were analysed using descriptive content analysis within the scope of this study. The researchers analysed the forms filled out by the participants separately and classified the amount of conformity of the studies with the scientific research stages as "appropriate, partially appropriate, and not appropriate" using a triple Likert type scale. The researchers operated in line with the findings of the analyses of the suitability of the scientific research steps completed by the participants. The researchers finished their examination by reaching an agreement on the issues where they differed. Furthermore, verbatim quotations were used to include material written by participants in the scientific study processes. Descriptive content analysis is the in-depth assessment and arranging of research conducted independently of one another in a certain field or subject (Ültay et al., 2021). In this regard, the research data were analysed using descriptive content analysis in order to make this research data more intelligible and to gain access to more in-depth information in this study.

Findings

Findings related to scientific research levels of 5th grade students

23 people from 5th grade students participated in this research. In this context, information on the suitability of the research conducted by the students with the scientific research steps is given in Table 3.

Table 3

Level of application of scientific research steps of 5th grade students

Scientific Research Steps	Suitable Frequency	Partially Suitable Frequency	Not Suitable Frequency	Total Frequency
Determining the research question-problem	23	-	-	23
Determination of Assumptions-Hypotheses	18	2	3	23
Determining the purpose of the research	17	4	2	23
Determining the importance of the research	11	4	8	23
Testing Assumptions-Hypotheses	18	3	2	23
Writing the research report	20	1	2	23
Giving the references	23	-	-	23

According to Table 3, all of the participants (23 persons) wrote the research question-problem correctly. It was decided that 18 of the 23 individuals were appropriate to determine the study assumptions, two people were somewhat appropriate, and three participants were not. It was concluded that 17 of the 23 participants were appropriate for identifying the goal of the research, four were somewhat eligible, and two were not. It was concluded that 11 out of 23 individuals were appropriate to assess the significance of the research, four persons were marginally acceptable, and

eight participants were not. It was determined that testing the assumptions of 18 out of 23 participants was appropriate, three participants were partially suitable, and two participants were not. Twenty-three out of 23 participants wrote their research reports appropriately. It was determined that one participant's research report was partially appropriate and two participants were not. However, when the research reports prepared by the participants were examined in detail, it was determined that all of the participants wrote the information they received from the general network as well as in the research reports. All of the participants included references in their research. However, when the bibliographies of the participants were examined, it was determined that they included a limited number of sources (1-4 sources). One of the participants included one source in their research, four of them, three of two, two of five and 15 of them. Almost all of the resources given (22 out of 23) are from public network addresses. The way the references are presented is generally appropriate (22 out of 23).

In the scientific research level determination form of some of fifth grade students; The information they express about the research question, the assumptions-hypotheses of the research, its purpose, importance and the testing of the assumptions-hypotheses are given below with direct quotations.

Regarding research question-problem: K1: "What are the effects of sun rays on our skin and body.", K10: "What are the effects of global warming on people?" formulated research questions. Regarding the determination of the assumptions-hypotheses of the research: K1: "Sun rays cause diseases on human skin.", K10: "Global warming adversely affects the life of living things." determined the research hypotheses. Regarding the purpose of the research: K1: "The purpose of this research is to determine the benefits and harms of sun rays on our body." K10: "The purpose of this research is to determine the effects of global warming on people." determined the aims of his research. Regarding the importance of the research: K1: "The sun is a source of life for all living things. Therefore, this research is very important in terms of determining the effects of sun rays on our body.", K10: "Global warming is threatening our world day by day. That's why this research is so important in determining the effects of global warming on humans." identified the importance of his research. Regarding the testing of the assumptions-hypotheses of the research: K1: "Staying in the sun for a long time causes skin diseases. Therefore, sun rays cause diseases on human skin.", K10: "Global warming causes the death of living things in the poles by melting the glaciers. Therefore, global warming negatively affects the life of living things." They tested the hypotheses of the research.

Findings related to scientific research levels of 6th grade students

This study included 22 sixth-grade pupils. Table 4 provides information on the appropriateness of the students' research with scientific research stages in this regard.

Table 4

Level of application of 6th grade students in scientific research steps

Scientific Research Steps	Suitable	Partially Suitable	Not Suitable	Total
	Frequency	Frequency	Frequency	Frequency
Determining the research question-problem	22	-	-	22
Determination of Assumptions-Hypotheses	19	2	1	22
Determining the purpose of the research	16	3	3	22
Determining the importance of the research	8	10	4	22
Testing Assumptions-Hypotheses	18	2	2	22
Writing the research report	20	2	-	22
Giving the references	22	-	-	22

According to the data in Table 4, all of the participants (22 persons) wrote the research question-problem correctly. It was established that 19 of the 22 individuals were appropriate for determining the study assumptions, two were somewhat suitable, and one person was not. It was concluded that 16 of the 22 participants were appropriate for identifying the goal of the research, three people were somewhat eligible, and three persons were not. It was concluded that 8 out of 22 individuals were appropriate to assess the significance of the research, 10 people were moderately acceptable, and four participants were not. It was decided that assessing the assumptions of 18 of the 22 participants was appropriate, two were somewhat appropriate, and two were not. Twenty-two of the 22 participants completed their study papers correctly, with two writing them somewhat correctly. When the students' research reports were investigated in depth, it was discovered that virtually all of the students wrote the information they acquired from the general network as well as in their reports. In their study, all of the participants provided a references. However, when the participants' bibliographies were analysed, it was discovered that they only listed a small number of sources (1-4). Two of the participants included four sources, two of them two, one of nine, and three of nine participants in their research. All of the resources given (22) are taken from public network addresses. The way the references are presented is generally appropriate.

In the scientific research level determination form of some of the sixth grade students; The information they express about the research question, the assumptions-hypotheses of the research, its purpose, importance and the testing of the assumptions-hypotheses are given below with direct quotations.

Regarding the research question-problem: K24: "What are the effects of the earthquake on people?", K30: "What are the effects of mathematics on people?" formulated research questions. Regarding the determination of the assumptions-hypotheses of the research: K24: "Earthquakes affect people's lives negatively.", K30: "If we had less knowledge about mathematics, people's lives would be negatively affected." determined the research hypotheses. Regarding the purpose of the research: K24: "The purpose of this research is to determine the effects of the earthquake on people.", K30: "The purpose of this research is to determine the effects of mathematics on people." determined the aims of his research. Regarding the significançe of the research, K24 states, "This research is important in terms of determining the effects of earthquake, which is a widespread natural disaster that has devastating effects on people throughout the world and in our country." K30

states, "Mathematics is a science that is present in almost every aspect of our lives." This research is significant in terms of determining the impact of mathematics on humans." underlined the value of their research In terms of testing the study assumptions-hypotheses: "Earthquakes have a very negative impact on people's lives because they are devastating," says K24., K30: "Mathematics facilitates many aspects of our daily lives." For example, if we didn't have mathematics, we would have a lot of trouble purchasing goods. That is why mathematics plays such a significant role in people's lives."

Findings related to scientific research levels of 7th grade students

This study included 20 pupils from 7th grade. Table 5 provides information on the appropriateness of the participants' research with the scientific research stages in this context.

Table 5

Level of application of scientific research steps of 7th grade students

Scientific Research Steps	Suitable Frequency	Partially Suitable Frequency	Not suitable Frequency	Total Frequency
Determining the research question-problem	18	-	2	20
Determination of Assumptions-Hypotheses	18	-	2	20
Determining the purpose of the research	18	-	2	20
Determining the importance of the research	15	3	2	20
Testing Assumptions-Hypotheses	14	3	3	20
Writing the research report	13	5	2	20
Giving the references	18	-	2	20

According to the data in Table 5, 18 out of 20 participants wrote the research question-problem appropriately, but two out of 20 did not write it appropriately. It was determined that 18 out of 20 participants were appropriate to determine the assumptions of the research, and 2 out of 20 were not. It was determined that 18 out of 20 participants were appropriate to determine the purpose of the research, and 2 out of 20 were not. It was determined that 15 out of 20 participants were appropriate to determine the importance of the research, 3 out of 20 were partially appropriate, and 2 out of 20 were not. It was determined that testing the assumptions of 14 out of 20 participants was appropriate, 3 out of 20 were partially appropriate and 3 out of 20 were not. It has been determined that 13 out of 20 participants are suitable for research reports, 5 out of 20 are partially appropriate and 2 out of 20 are not. However, when the research reports prepared by the students were examined in detail, it was determined that almost all of the students wrote the information they received from the general network as well as in the research reports. While 18 out of 20 participants included references in their research, 2 out of 20 did not. However, when the bibliographies of the participants were examined, it was determined that they included a limited number of sources (1-4 sources). Two of the participants included five, eight people one, three people two and five people included three sources in their research, while two of them did not include any sources. All of the resources given (20) are taken from public network addresses. The way bibliographies are presented is generally appropriate.

In the scientific research level determination form of some of the seventh grade students; The information they express about the research question, the assumptions-hypotheses of the research, its purpose, importance and the testing of the assumptions-hypotheses are given below with direct quotations.

Regarding the research question-problem: K50: "What are the effects of landforms on people?", K60: "What are the effects of the Covid-19 pandemic on people's social lives? formulated research questions. Regarding the determination of the assumptions-hypotheses of the research: K50: "Earth forms affect the economic activities of people. Landforms affect people's psychology, transportation and nutrition.", K60: "The Covid-19 pandemic has negative effects on people's social lives." expressed the research hypotheses. Regarding the purpose of the research: K50: "The purpose of this research is to determine the various effects of landforms on people. The purpose of this research is to determine the effects of landforms on economic activities, human psychology, transportation and people's nutrition.", K60: "My main purpose in conducting this research is to determine the effects of the Covid-19 pandemic on people's social lives." determined the aims of his research. Regarding the importance of the research: K50: "Earth forms are a natural factor that affects climate, vegetation and living things in various ways. In this respect, it can be said that this research is important in terms of determining the various effects of landforms on people's lives.", K60: "The Covid-19 pandemic is a very important epidemic disease that affects the whole world. Unfortunately, millions of people and living things have been adversely affected by this epidemic. In this respect, I can say that this research is important in terms of determining the effects of the Covid-19 pandemic on people." expressed the importance of their research. Regarding the test of the assumptions-hypotheses of the research: K50: "The landforms have various effects on people's economic activities, psychology, transportation activities and eating habits.", K60: "As millions of people cannot leave their homes due to the Covid-19 pandemic, this situation negatively affects people's social life. affected." He wrote statements to test his research hypotheses.

Findings on the scientific research levels of fifth, sixth, and seventh grade students

In Table 6, findings related to the level of application of scientific research steps by 5th-7th grade students are given.

Table 6

Comparative level of application of scientific research steps by secondary school students from 5th to 7th grades

Scientific Research Steps	5th grade Suitability	6th grade Suitability	7th grade Suitability	Average Suitability
Determining the research question-problem	%100	%100	%90	%97
Determination of Assumptions-Hypotheses	%78	%86	%90	%85
Determining the purpose of the research	%74	%73	%90	%79
Determining the importance of the research	%48	%36	%75	%53
Testing Assumptions-Hypotheses	%78	%82	%70	%77
Writing the research report	%87	%91	%65	%81
Giving the references	%100	%100	%90	%97
General Overage	%80.71	%81.14	%81.42	%81.09

According to the data in Table 6,It was determined that the level of scientific research of primary school students was at a high level of about 81.09% (overall average). It has also been determined that the scientific research levels of the 6th grade students are very close to each other. The class with the highest level of scientific research is seventh grade (81.42%) and the lowest level is the fifth grade (80.71%). The highest rate (100%) in determining the research question-problem belongs to the 5th and 6th grades. The highest rate (90%) in determining the assumptions-hypotheses and the purpose of the research belongs to the 7th grades. In determining the importance of the research, the highest rate (75%) belongs to the 7th grades. The highest rate (82%) in testing assumptions-hypotheses belongs to 6th graders. While the highest rate of writing the research report (91%) belongs to the 6th grades, the highest rate (100%) of including the references in the research belongs to the 5th and 6th grades. According to the averages of all participants, the steps performed at the lowest level among the scientific research steps are the importance of research (53%) and testing hypotheses (77%). According to the average of all participants, the sections that the participants performed at the highest level from the scientific research steps were to determine the research question (97%) and to include the references (97%). In addition, when the research reports of all participants were examined, none of the participants made in-text references in the research report they prepared.

Conclusion, Discussion and Recommendations

Scientific research levels of 5th, 6th and 7th grade students, whose scientific research levels are quite close to each other, are high. The class with the highest level of scientific research is the seventh grade, while the lowest is the fifth grade. While the level of determination of the research question-problem is the highest in the fifth and sixth grades, the level of determining the assumptions-hypotheses, the purpose and importance of the research is the seventh graders. They are the sixth graders with the highest level of testing the assumptions-hypotheses and writing the research report. According to the presentation of the research reports, almost all of the students wrote the information they received from the general network in their reports. The fifth and sixth grades have the highest level of references in the research. While the steps that the participants perform at the lowest level among the scientific research steps are the importance of the research and testing the hypotheses, the steps they perform at the highest level are determining the research question and giving place to the references. In addition, none of the participants can display in-text references in research reports.

According to the results of this research, 5-7th grade students' scientific research levels are high and very close to each other. This result may be due to the fact that the students learned this subject well in the social studies course. As a matter of fact, according to Erdoğan (2018), when the studies on science and social sciences are examined, there is an increase in the scientific research skills of students every year. In addition, according to Piaget, the subject of scientific research steps should be taught to secondary school students due to the development of logical thinking, concrete and abstract thinking, and problem solving skills in secondary school students (Sakallı, 2022). In this respect, one of the reasons for the high scientific research levels of secondary school students may be related to the developmental stages of the students. As a matter of fact, children at this age may have a high level of curiosity, desire to explore and questioning skills. One of the reasons why students' scientific research levels are high may be that students have fun and enjoy themselves while doing their research in line with the principle of 'learning by doing and experiencing'. As a matter of fact, according to Akay (2013), the principle of learning by doing and living, which is one of the important principles of learning,

helps students to enjoy learning and to take responsibility for learning. If a student uses more sense organs in terms of learning in social studies course, his/her success on the subject increases. For example, if a student finds out where these riches are used and where they are extracted from, and shows them with a map he/she has drawn, and can explain their ratio in the country's economy in the graphics he/she prepares, the learning activity will be more meaningful and permanent (Ata & Bağcı, 2007). Conducting research that reflects children's perspectives is a liberating and transformative approach for researchers, educators and children (Siry & Lang, 2017). In this direction, according to Çalışkan and Turan (2010); If the research steps applied in research-based teaching in social studies lesson are taken into consideration and models suitable for research problems are selected and planned, learning activity in social studies lesson turns into a more enjoyable one.

According to the results of this study, the participants showed the importance of the research and performed the testing steps of the hypotheses at a low level. This result may be due to the fact that students did not learn enough about the importance of research and testing hypotheses from scientific research steps, or they did not have enough knowledge about these concepts. As a matter of fact, according to Erdal and Sarı (2020), since the main goal of education is to prepare students for life, students should be taught scientific process skills. In addition, according to the results of the study by Sakallı et al. (2022), in which TÜBİTAK secondary school students (2204-B) examined the geography research projects in line with the scientific research steps, scientific research steps were not mentioned much in the methodology of the projects in the field of geography participating in the research projects competition.

In addition, there are methodological deficiencies even in the projects that participated in the Turkey final, since scientific research steps are not included in these studies.

In this study, the scientific research step performed by the students at the highest rate is the research question-problem determination stage. Subject selection in scientific research to be conducted is the first step of the research (Dönmez, 2016; Sakallı, 2022; Usta, 2019). In this study, the fact that almost all of the participants (97%) determined the research problem-questions appropriately may have been due to the fact that the students learned the first step of the scientific research steps well, their intrinsic motivation and the developmental stage of the children. As a matter of fact, if students have intrinsic motivation and their motivation is supported, their cognitive processes such as activating their prior knowledge and asking questions turn into a more fluent form (Taboada et al., 2009). According to Çalışkan and Turan (2010), if students research, think, decide and produce solutions like scientists in the research process by applying scientific research methods, learning becomes more meaningful and permanent. In this respect, according to Hu and Adey (2002), scientific creativity of people is also developed depending on their scientific knowledge and skills. For this reason, it is necessary to develop scientific literacy in people in order to increase people's trust in science and the work of scientists (Ploj-Virtic, 2022). In order to develop students' perceptions about science, their ideas about scientific research activities should be learned and their application skills should be developed (Lederman & Lederman, 2005). In this respect, applications and activities that encourage children's scientific creativity should be included in the teaching process starting from pre-school education (Siew et al., 2017). Scientific practices and activities are important tools to produce and organize information about the world around us (Ongowo, 2017). In the light of these explanations, the high rate of scientific research question-problem determination by the students in this study may be due to the fact that they learned this subject well in the course. In this respect,

this result is important in terms of developing students' scientific literacy and scientific process skills.

According to the findings, all of the participants included no in-text resources and just reported the material they acquired from the broader network in their study reports. This result has a high degree of overlap with Elbay's (2020) research. In fact, Elbay (2020) discovered in his study of seventh-grade social studies students' scientific research that the students consider scientific research as a general online search and replicate the sources as they are without challenging them. Elbay's (2020) research found that 7th grade pupils were unable to perform scientific research in conformity with scientific concepts and standards. These findings might be attributed to secondary school pupils failing to master the reporting stage from scientific research stages or failing to internalise this subject. As a result, Sönmez (2011) believes that students should be taught scientific research procedures through practising and living in educational contexts with example issues.

Based on the findings of this study, it is suggested that researchers undertake more thorough investigations (such as action research) to increase the scientific research levels of secondary school students. Furthermore, recommendations to curriculum practitioners to strengthen secondary school students' skills in compiling a references, writing a research report, referencing in-text references, identifying the value of the study, and verifying the research hypotheses.

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The Effect of Foreign Language Learning on the Use of Mother Tongue[1]

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Abstract

The aim of this study is to reveal the effect of foreign language learning on mother tongue use. Case study design, one of the qualitative research designs, was used in the study. In order to keep the sample large, 70 pre-service teachers were selected using simple random sampling method among the 4th year undergraduate students studying in three different foreign language education departments in 2016-2017. The research data were analysed using deductive analysis method. As a result of the research, the pre-service teachers who participated in the research think that language learning is a necessity and that individuals learn languages out of necessity. The pre-service teachers state that interest in the target language is an important condition for language learning, that if there is no interest, the language cannot be learnt, and that belonging to a common language family increases interest in the language and facilitates language learning. The desire to communicate with other individuals in the world, to improve oneself, to learn the culture of the target language and to live abroad are among the reasons for learning a foreign language. Learning the education system and sound harmony of the target language and economic concerns are among the reasons for language learning. The pre-service teachers who participated in the study stated that they had the most difficulty in learning basic language skills in foreign language learning and that they made comparisons with their mother tongue while learning a foreign language. The pre-service teachers who participated in the research stated that they pay attention to the use of the mother tongue while learning a foreign language; they pay attention to the use of the mother tongue while learning a foreign language because they benefit from the love of the mother tongue and translations.

Keywords: Foreign language, case study, use of mother tongue.

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[1] This research was presented as a summary paper at the RESSCONGRESS International Educational Sciences Social Sciences Symposium held in Bandırma.

Introduction

Language is a natural tool that provides agreement between people, a system of secret agreements that has its own laws and that develops only within the framework of these laws, a system of secret agreements that was made when the basis of a living being was not established, is a social institution woven from sounds (Ergin, 2013). Banguoğlu (1986) defines language as a system of sound signs that people use to express their purports and intentions. According to Develi (2011) language is the qualities that gather common cultural contents and other attitudes under a single identity and make them 'us'. "When future generations learn their language, they not only learn their own language, but also learn the characteristic lifestyles of their ancestors and the unique features of the society they live in" (Göçer, 2012, p.51). "Since the main means of communication between people is inevitably and indispensably language, this medium is the jugular vein of a culture and society" (Develi, 2011, p. 23).

Language is the most concrete form of thought. Thoughts become concrete according to the patterns of the language (sentences, words, sentence order, etc.). The languages used by individuals who can think clearly and correctly are also clean and smooth (Avcı, 2012). The universe is shaped in our minds according to our mother tongue; we detect our environment with our mother tongue, we name beings and situations by always understanding and explaining it" (Aksan, 1975, p. 428).

Language and thought are inseparable parts of each other. Disruption in one will definitely spoil the other. Today, foreign language learning is necessary in the world where the borders have been removed; However, after the mother tongue's mentality is established on solid foundations, it should be taught consciously and it should be done by adopting the foreign language as a tool, not a goal. Each individual has a system of thought and their own language in which they convey their thoughts. People in the same thought system use the same language, the same words carry the same concept and meaning in their minds. Culture, on the other hand, is the rooted state of these ideas, the way of life. The sum of all these gives us the nation. In other words, common thought, common language and common culture are the basic building blocks of the nation. Each language carries the culture and thoughts of the nation it represents. While learning a foreign language, we unwittingly learn the culture and thought of the target language. It is possible that they do not like the nation, culture and way of life they live in, and adopt the thought and culture they have acquired together with a foreign language and look at their own culture with the eyes of the other and despise them.

"Mother tongue means the language that the child acquires from his family and the community he lives in" (TDK, 2011, p. 119). According to Aksan (1998), mother tongue is the language that is learned initially from the family and close family circle, and then from the related environment, goes down to the subconscious of the person and forms the strongest bonds of individuals with the society. The Turkish language is flexible, unlimited in terms of functionality, and unique in terms of the ways of generating new words. For this reason, we can liken Turkish to space because of its infinity. It has been subjected to many undermining in its thousands of years of history. Despite this, it maintains its strength. Our problem is that we do not see this power. We make the mistake of despising Turkish as it was centuries ago. It is possible to see examples of this in our history. There can be two reasons for the persecution of language. The first is the feeling of humiliation due to ignorance, and the second is the desire to prevent the formation of the belief that this nation can be self-sufficient.

As a result of the agreements made with Western states during the Ottoman Empire, Western states gained privileges in the field of economic, political and even education. Until the Tanzimat, no law was made for foreigners to open schools and no privilege was given. Schools for foreigners were allowed to be opened only for religious activities to teach their children their religion. However, after the Tanzimat, there was a significant increase in the number of schools opened by foreign states. These schools carried out missionary work within the state with the privileges they obtained. For example, graduates of American schools, which went into small settlements within the country, were active in the separation of Bulgarians, Albanians, Arabs and Armenians from the Ottoman Empire (Aksu, 2008). After the establishment of the Republic of Turkey, the language that has been neglected for many years has begun to be emphasized. With the establishment of the Turkish Language Institution, Turkish language took on an institutional identity. The first day of the institution's convening, September 26, as a sign of determination that the Turkish language, which has been treated as a stepchild for centuries, is embraced by the state. As a result of the Ottoman Turkish period's intellectuals' love of Arabic and Persian, our intellectuals did not bother to search for foreign words. Therefore, the intellectuals' love for mother tongue, consciousness and feeling atrophied. The results of this were drawn in Turkish (Korkmaz, 2007). After the establishment of the Republic of Turkiye, all schools were connected to the state with the law enacted in 1924. With this law, foreign schools providing special education were closed. Private schools were established for the purpose of providing foreign language education to students, and a private school named Turkish Education Association was established on January 31, 1928, in line with Atatürk's request, for teaching foreign languages such as English. The language of education in Yenişehir High School, which was opened in 1930 by this association, which was established by Atatürk in order to get rid of the problem of education in a foreign language, is Turkish. By providing 10 hours of English support training per week, foreign language teaching is provided to the students. However, this association institution, founded by Atatürk with a national spirit, collapsed economically in 1954 and was sold to foreigners. Immediately after this change, the education language of the school suddenly became English, the teaching staff changed, some of the educators were dismissed until that year, and teachers who could teach in English were brought to the duty of teaching. Unfortunately, this radical change in Yenişehir High School has been the key to the change in the language of instruction in other schools. After 1954, the number of Anatolian (!) High Schools increased, and the expansion of private schools providing education in a foreign language was allowed. In order for individuals to learn a foreign language more easily and to be more successful individuals in life, the foreign language education method chosen has been proven by studies to be harmful, not beneficial, over time. For example, Mirici et al. (2000) conducted research on students, teachers, parents, and supervisors to teach science courses in a foreign language in Anatolian high schools. As a result of this research (Mirici, Hoşgörur, Arslan and Aydın, 2000, p. 24):

Foreign language education makes it difficult for students to understand the lessons,. It is unnecessary to study other classes in a foreign language to learn that foreign language. The practice of teaching science courses in English negatively affects student success in the university exam. Teaching Science courses in a foreign language has been found not to be effective in achieving the objectives of these courses.

The nation, which is reborn with each generation, conveys the character traits to the next generations through the natural codes hidden in the language. Language exists with the nation. "An Englishman exists because he is English. An Armenian exists because he is Armenian. Today, it is impossible to talk about the existence of a

Sumerian because Sumerian is not spoken or written" (Yapıcı and Demir, 2007, p. 178). Based on this, it is concluded that it would be a great mistake to see mother tongue teaching as only language teaching. Mother tongue teaching is the key to our continuation as a nation. "The main purpose of mother tongue teaching is; It is the development of comprehension power, the acquisition of expression skills and habits, the formation of listening and reading habits and pleasure, the enrichment of personal active and passive vocabulary, the teaching of basic grammar rules, and the creation of language awareness and love" (Kavcar, Oğuzkan, & Sever, 1995; cited in Yapıcı). and Demir, 2007)

Foreign language teaching in Turkey was taught through supplementary courses as supplementary education until the early 1995s. With the legal regulations, the number of schools providing foreign language education has increased. These schools include middle schools, high schools and universities. In 1988-1989, a layered system was introduced for secondary schools. According to this system, students took the foreign language as a compulsory class in the first year, but it was optional in the following years and did not affect passing the class. This method was used once, but then it was abolished and the compulsory foreign language course was introduced again (Akyüz, 1993; Çelebi, 2006).

According to the regulation published in the official newspaper numbered 18868 on 14/09/1985, optional courses can be opened in the 4th and 5th grades of primary education, but compulsory language courses will be taught from the 6th grade. In fact, if the institutions providing education in a foreign language cannot find a teacher to teach a course in a foreign language, they have to get permission from the Ministry to teach the course in Turkish. The permission of the Ministry was adhered to in order to teach students in their mother tongue. However, this was taken a little further by the Foreign Language Teaching regulation published in the official newspaper numbered 26184 on 31/05/2006, making foreign language teaching a compulsory course from the 4th grade onward. In addition, schools would be able to offer courses to support foreign language learning if they wished so. With the amendment made in the Ministry of National Education Pre-School Education and Primary Education Institutions Regulations in 2014, English education began to be provided in primary schools as well. However, these courses had to be given by the language teachers. When such language teachers were not available, the primary school teacher could teach these foreign language classes (Official newspaper, 1985; 2006; 2014).

Research on foreign language teaching is important. The opinions of pre-service teachers studying in foreign language education about foreign language education are important in terms of determining the effect of foreign language learning on mother tongue. The aim of this study is to investigate the effect of foreign language learning on individuals' use of mother tongue.

METHOD

Research Design

The case study design, one of the qualitative research designs was used in the research. A case study is a research method that allows an in-depth study of a subject with questions such as why, how and when (Kaleli Yılmaz, 2014).

Working Group

The study group of the research consists of 70 4th grade students studying in the Department of English Language Teaching, German Language Teaching and Japanese Language Teaching at a state university in the west of Turkey.

Data Analysis

To analyze the data obtained in the research, the deductive analysis method was used. In this analysis method, the themes are summarized and interpreted based on the research question and sub-questions (Yıldırım and Şimşek, 2021, p. 244).

Data Collection Tool

In this study, data were collected through a semi-structured interview form. The data were obtained by using an interview form consisting of five (5) questions. First of all, an interview form was prepared by the researchers by consulting with three experts and revising it in line with their opinions.

RESULTS

In this part, the findings obtained from the research were analyzed.

Table 1

The reason for learning a foreign language according to pre-service teachers

Code	English Language Education	German Language Education	Japanese Language Education	Total
A common language	8	-	-	8
Interest in target language	3	2	10	15
Economic anxiety	2	-	-	2
Necessity	11	3	3	17
Making communication	3	2	-	5
Self develpment	7	-	-	7
Learning the culture of the target language	1	2	4	7
Desire to live abroad	1	5	-	6
Learning the education system of the target language	-	-	2	2
The tone of the target language	-	-	1	1

As seen in the answers given to the question "What are the reasons why you want to learn a foreign language?" in Table 1, people's attitudes towards foreign languages and the reasons for learning a foreign language were coded in 10 categories. English Language Teaching students stated the reasons for learning a foreign language as necessity, common language and self-development; German Language Teaching students stated interest in the target language, necessity, communication and desire to live abroad; Japanese Language Teaching students stated interest in the target language, learning the culture of the target language and necessity. The opinions of the students on the subject are as follows:

At first, I thought I had the aptitude, and then I started to learn Japanese in order to comprehend the Japanese education system (P39).

I admire Japanese culture (P28).

English is the world language and must be learnt (P27).

Foreign languages have become compulsory rather than a necessity for communication, and I started to learn foreign languages at the age of 10 because it could affect my professional life (P3).

I like learning languages and I want to live abroad in the future, so I think I should learn their cultures and languages (P8).

I have relatives in Germany and I want to join them and spend my life with them in Germany (P15).

Table 2

The most difficult subjects in foreign language learning

Code	English Language Education	German Language Education	Japanese Language Education	Total
Basic skills	21	7	9	37
Grammar	10	4	6	20
Frequency of use	12	6	-	18
Learning the culture of the language	-	-	2	2
Understanding the thought system of language	-	-	2	2

In Table 2, the answers to the question "What are the most difficult issues in foreign language learning?" are mainly focused on basic skills, frequency of use and grammar. When the data are analysed, it is seen that there are problems with speaking skill, which is one of the basic skills. English Language Teaching students expressed the most difficulties in foreign language learning as basic skills, grammar, frequency of use; German Language Teaching students as basic skills, grammar, frequency of use; Japanese Language Teaching students as basic skills, grammar, learning the culture of the language, understanding the thought system of the language.

Table 3

Thoughts on whether they have a good command of the grammar rules of Turkish

Code	English Language Education	German Language Education	Japanese Language Education	Total
No	8	7	8	23
Yes	22	5	9	36
Partially	6	2	3	11

According to Table 3, 61% of English Language Teaching students, 35.7% of German Language Teaching students and 45% of Japanese Language Teaching students stated that they had a good command of Turkish grammar rules. The opinions of the students on the subject are as follows:

When there are spelling mistakes or expression disorders in the texts I read, I feel the need to notice and correct them (P 28).

Although I do not pay attention in spoken language, I try to use it carefully in written language (P 29).

Yes, I have loved grammar since I was little. I love my country, history and nation and I think I have a good command of them (P 30).

Table 4

Opinions about whether they make comparisons with their mother tongue while learning a foreign language

Yes f(43)	English Language Education	German Language Education	Japanese Language Education	Total
Making learning easier	16	4	6	26
Learning the target culture	4	6	3	13
Mother tongue love	2	1	1	4
No f(27)	14	3	10	27

According to Table 4, most of the pre-service teachers who participated in the study stated that they made comparisons with their mother tongue while learning a foreign language. The opinions of the students on the subject are as follows:

Yes, because the sentence structures of English seem ridiculous (P10).

Yes, I got help from my mother tongue while learning a foreign language because I always think and speak Turkish in my head (P12).

Yes, it is useful to start from what we know while learning something new (P18).

In the 3rd grade, I only did it in the comparative grammar lesson (P 21).

I did it to see their similarities and differences (P26).

Yes, I like Turkish more (P19).

The rules of each language are a whole in itself, you cannot learn them by making comparisons (P22).

I do not do it because it causes confusion (P23).

Table 5

Whether or not to pay attention to the use of the mother tongue while learning a foreign language

Yes	English Language Education (26)	German Language Education (4)	Japanese Language Education (6)
Making use of translations	13	3	5
mother tongue love	10	1	1
No	English Language Education (10)	German Language Education (6)	Japanese Language Education (9)
Learning the target language better	6	3	-
Be interested in foreign languages	2	1	1
Lack of knowledge of mother tongue	1	2	2
Dislike your mother tongue	1		6
Partially	3	2	4

According to Table 5, the university students who participated in the research stated that they pay attention to the use of mother tongue while learning a foreign language. The opinions of the students on the subject are as follows:

No, the target language distorts the mother tongue (P20)

Involuntary deterioration of the mother tongue (P23)

Using English syntax or vocabulary in the first language (P 36)

Interruption of English words while speaking in the mother tongue (P 44)

Mixing two languages together (P57)

I do, because when I don't pay attention, very ridiculous things come out: "god demn it made me so angry" (P69)

No, no. Because I do not like my mother tongue (P66)

No, I paid attention to think and speak in the target language in order to learn the target language well (P 45)

Yes, I was careful because I did not want the target language to spoil my mother tongue (P 48)

Discussion and Conclusion

As a result of the research, the pre-service teachers who participated in the research think that language learning is a necessity and that individuals learn languages out of necessity. Pilancı (2015) and the foreword of the dictionary preparer of Külliyât-ı Mükâleme-i Elsine (Şişman, 2023: 226) emphasise that language learning is a necessity, similar to this research.

The pre-service teachers think that interest in the target language is an important condition for language learning and that the language cannot be learnt if there is no interest. In his study, Karşı (2022) stated that the use of materials facilitates learning and increases the interest in the target language and the desire to learn. Hamurcu and Ekinci (2020) stated in their research that the main objective of the 5th grade English curriculum is to increase students' interest and attitudes towards the target language. supporting the texts in the textbook with visuals increases the interest in the target language.

Pre-service teachers state that being a member of a common language family increases interest in the language and facilitates language learning. The desire to communicate with other individuals in the world, to improve oneself, to learn the culture of the target language and to live abroad are among the reasons for learning a foreign language. Learning the education system and sound harmony of the target language and economic concerns are among the reasons for language learning. The most important reason for language learning is seen as necessity by the students of the Department of English Language Teaching, the desire to live abroad by the students of the Department of German Language Teaching, and the interest in the target language by the students of the Department of Japanese Language Teaching. The reasons for language learning vary according to the main discipline of education.

The pre-service teachers who participated in the research stated that they had the most difficulty in learning basic language skills in foreign language learning. Sheta, Jdaitawi and Essa (2020) stated in their research that difficulties in learning basic language skills such as speaking, reading, spelling and writing can be expressed as learning difficulties. In addition to basic language skills, pre-service teachers stated that they had difficulties in grammar and frequency of use. The students of the Department of Japanese Language Teaching stated that learning the culture of the

language and comprehending the thought system of the language were also difficulties in learning a foreign language. Although pre-service teachers in the department of foreign language education stated that they have a good command of Turkish grammar, there are also pre-service teachers who think that they have a partial command of Turkish grammar or who think that they do not have a good command of Turkish grammar.

The pre-service teachers who participated in the research stated that they made comparisons with their mother tongue while learning a foreign language. Tosun (2005) stated that the classification of words and word types according to their constructional and formal appearances would benefit linguistics, foreign language teachers and students in terms of getting to know the language in question, approaches, methods and comparisons with other and their mother tongues, and realising conscious learning and teaching by identifying similarities and dissimilarities. Pre-service teachers stated the reasons for making comparisons with their mother tongue while learning a foreign language as facilitating learning, learning the target culture and love of mother tongue. The students of the Department of Japanese Language Teaching were undecided about their views on making comparisons with their mother tongue while learning a foreign language.

The pre-service teachers who participated in the research stated that they pay attention to the use of mother tongue while learning a foreign language. The pre-service teachers stated that they pay attention to the use of mother tongue while learning a foreign language because of their love of mother tongue and because they benefit from it in translations. The pre-service teachers who stated that they pay attention to the use of mother tongue while learning a foreign language stated the reasons for this as learning the target language better, being interested in the foreign language and not liking the mother tongue.

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