

Teacher Cognition in Grammar Teaching: A Case Study in a Turkish EFL Context

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Abstract:


This Language Teacher Cognition (LTC) study primarily explores language teachers' beliefs and practices about a common Instructed Second Language Acquisition (ISLA) construct: Grammar Teaching (GT). This study also aims to investigate to what extent teacher beliefs and practices compromise with each other and cognitive and contextual factors behind their cognition. The data were collected through interviews, observations, and stimulated recall with the teachers. The findings after a cross-case analysis revealed that course book-based beliefs, experience-based beliefs, lack of theoretical knowledge and inclination for communicative activities influence what teachers believe about GT. There are both congruent and incongruent relationships between beliefs and practices varying from one teacher to another due to the effect of experiential knowledge, unconscious decisions, and some contextual factors. The findings can contribute to the integration of LTC into ISLA studies, and to LTC framework by exploring the effects of many variables on teachers' decision-making processes.

Keywords:

Language teacher cognition (LTC), grammar teaching (GT), teacher beliefs, teacher practices

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INTRODUCTION

Language teacher cognition studies drew substantial attention especially in the last 25 years, and the number of studies conducted in this research domain has dramatically increased. Teacher cognition as a theoretical framework refers to a complex combination of knowledge, beliefs and thoughts hold by language teachers regarding their instructional decisions and actions (Borg, 2006). It is also foregrounded that this complex cognitive activity of teachers has its roots from their experience-based, personalized and context-sensitive perspectives and attitudes (Farrell & Lim, 2005). On the basis of this complexity, the relationship between teachers' beliefs and their instructional practices has been the interest of many studies in the field of Language Teacher Cognition (LTC).

LTC studies can provide an opportunity to explore teaching contexts for the situation in which language teachers deviate from their epistemological beliefs, which are related to teachers' teaching and learning philosophies, by adopting practices that are not in line with these beliefs (Basturkmen et al. 2004). Reasons for the consistency between stated beliefs and teachers' practices are attributed to the powerful influences of beliefs on language teaching (Pajares, 1992). As for the underlying reasons for the deviations from beliefs, several contextual factors are mentioned to have a role in adopting a teaching practice that is at odds with beliefs. Institutional curricula, time limitations, high-stakes examinations are among these contextual factors (Phipps & Borg, 2009). In this sense, both convergences between epistemological beliefs and instructional practices and divergences from stated beliefs have the potential to reveal the core cognition, which refers to more permanent beliefs compared to peripheral ones, beyond the teaching of language teachers.

There is lack of generalizability in L2 teaching studies in terms of the outcomes because of several factors including teaching styles, individual learner differences, power relationships, gender identities, religious beliefs and more (Long, 2017). Hence, the problem of generalizability requires examining other confounding variables such as teachers, their beliefs and their teaching more closely to have a deeper understanding of each instructional context and specific instruction that is implemented in that context. The inclusion of teacher cognition into grammar teaching studies can be beneficial in that teachers' epistemological beliefs shape the way they teach grammar, and it may be unlikely to change these beliefs with teacher education or research findings without creating an awareness and reflection opportunity to revise the aforementioned beliefs (Basturkmen, 2007; Borg, 2011). Thus, this study will offer a teaching context to be analysed on the basis of grammar teaching to bridge the gap between ISLA and LTC.

In addition to the gap between ISLA and LTC studies, the other problem in LTC studies is lack of comprehensive studies that encompass the cognitive and contextual factors considered to be influential in teacher cognition rather than a single variable such as academic background, teaching experience, and learning experience. Lack of this kind of studies in the field regarding this relationship (Long, 2017) impedes having insight into

how language teachers' beliefs and practices compromise with each other and to what extent cognitive and contextual factors affect the way they make instructional decisions.

In this sense, this study aimed to investigate belief systems of four EFL teachers and their classroom practices with regard to grammar teaching in a Turkish context. Starting with their general beliefs about grammar instructions, their actual performances are compared to their beliefs to see to what extent beliefs and practices correspond with each other and the underlying reasons for congruence and divergence between epistemological beliefs and observed practices. This study also aimed to contribute to the existing body of research by exploring teachers' beliefs in grammar teaching and relating them to ISLA studies in order to provide a perspective within which the role of instruction in language teaching can be analysed in a relatively more inclusive way. Correspondingly, this study aimed to provide a chance for teachers to reflect on their performances based on their beliefs, which offers a basis to have a better understanding of the rationale behind the relationships between stated beliefs and observed practices in addition to the effects of contextual factors on their beliefs and practices. For these purposes, following research questions formed the basis of the study:

1. What are the beliefs of language teachers regarding L2 grammar teaching?
2. What instructional practices do language teachers use to teach grammar?
3. How do teachers' cognition and their practice compromise with each other?
4. What are the reasons for consistencies or inconsistencies between teachers' beliefs?
5. What are the contextual factors influencing teachers' instructional decisions?

LITERATURE REVIEW

Language Teacher Cognition

Before the concept of teacher cognition started to be used dominantly in the literature, teacher belief was defined as "broadly as tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught" (Kagan, 1992, p.65). Teacher cognition is defined as "what teachers know, believe and think and teachers are active, thinking decision-makers who make instructional choices by drawing on complex practically-oriented, personalized, and context-sensitive networks of knowledge, thoughts, and beliefs" (Borg, 2003, p. 81). Having aimed to operationalize the teacher cognition framework, Borg (2003) states that teacher cognition encapsulates "beliefs, knowledge, theories, attitudes, images, assumptions, metaphors, conceptions and perspectives about teaching, teachers, learning, students, subject matter, curricula, materials, activities, and self." (p. 82). As for the factors shaping the dynamics of this operational definition, Borg (2003) puts forward four main factors: the role language

learning experiences of teachers, their professional career, contextual realities, and teaching practices.

This complex nature of teacher cognition is claimed to have a significant influence on instructional decisions made by teachers in class and their pedagogical and instructional practices since teachers' beliefs regarded as cognitive filters underlying teachers' performances in instructional settings (Shavelson & Stern, 1981). Likewise, Johnson's (1994) educational research on teachers' beliefs share three basic assumptions: (1) Teachers' beliefs influence perception and judgment. (2) Teachers' beliefs play a role in how information on teaching is translated into classroom practices. (3) Understanding teachers' beliefs is essential to improving teaching practices and teacher education programs (p. 439)

While consistencies are taken into account and considered to be key to language achievement, inconsistencies between beliefs and practices can also be the source of research studies (Karavas & Doukas, 1996; Richards et al., 2001). In this sense, Phipps and Borg (2009) claim that language teachers can have two different belief systems: peripheral and core beliefs. While they have core beliefs formed based on their ideology, teaching philosophy and education, they also adopt some peripheral beliefs that are at odds with their core beliefs. The reason for this is attributed to the contextual necessities urging teachers to adapt their beliefs and perform accordingly. Thus, it can be said that the inconsistencies occurring in class in terms of core beliefs and practices can be attributed to peripheral beliefs adopted by language teachers in order for a better learning environment. When it comes to the notions influencing teacher cognition, they include teachers' learning experience, their pre-service education, and context in which they work (Johnson, 1994). Teachers' previous language learning experiences can have substantial effects on their cognition (Holt Reynolds, 1992; Lortie, 1975). Likewise, teachers' pre-service education is regarded as one of the main factors playing a role in teacher cognition (Jafarigohar & Kheiri, 2015); however, it is also acknowledged that what teachers believe as a part of teacher cognition can surpass the effect of teacher education (Kagan, 1992; Richardson 1996). As for the role of contextual factors, it is widely accepted that contextual factors of an institution such as timing, syllabus and students' proficiency level and their attitudes can substantially influence teachers' beliefs and their instructional decisions in those institutions (Andrews, 2007).

LTC in L2 Grammar Teaching

The studies conducted in the field carry a prominent potential to indicate what kind of variables influence teacher cognition and how these variables are reflected in L2 grammar teaching practices. Firstly, Farrell and Lim (2005) put forward the fact that language teachers' beliefs and practices can constitute a unity in a compatible way in that most of the beliefs and practices of language teachers were found to be consistent. Likewise, Sanchez and Borg (2014) revealed some findings that support this compatible

aspect of beliefs and practices in that the participants were observed and it was found that their beliefs and practices consistently complement each other. The reason for this consistency was attributed to the flexible nature of the context because teachers were not restricted with the institutional policies and they were allowed to implement their pedagogies in class. However, this kind of context is not always available in all language learning environments. For instance, Nishimiro and Borg (2013) state that the participants in their study used teacher-led grammar instruction for 80% of the time and the teachers related it to the necessity to catch up with other classes, time limitations stemming from the pacing and the exams containing discrete-point grammar questions. Similarly, Moini (2009) touches upon the differences between state and private schools, which affects how language teachers perform. In this sense, it is stated that language teachers in private schools carry out various activities compared to state schools and this difference is related to the limitations in state schools and the students' low motivation.

However, it is also possible to see that while there is a plausible context; language teachers may not adapt their previous cognition in accordance with the requirements of this context. Liviero (2017) points out that although there has been a new policy ensuring a more communicative, functional and skill-based curriculum for modern languages in England, the teachers maintained traditional approach. This mismatch is attributed to the teachers' personal language learning experience and the previous teaching context.

Apart from consistent and inconsistent relationships between beliefs and practices and the influence of contextual factors stated above, another finding that can be obtained from these research studies is the role of teachers' background in their cognition. Graus and Coppen (2016) conducted a study with undergraduate and postgraduate language teachers, and they revealed that the role of student expectations and teaching experience are in common in both groups. Besides, they differ from each other in that undergraduate teachers rely more on their language learning experience than postgraduate teachers do. In a similar study, Moini (2009) highlights that postgraduate teachers teach grammar inductively and form and meaning are integrated. However, undergraduate teachers teach L2 grammar more structurally and deductively. It can be inferred that the academic background of language teachers might have an influence on their cognition, however Borg and Burns (2008) revealed some findings that do not support the role of academic background. Accordingly, EFL teachers use a more integrated way of teaching grammar and it does not derive from teacher education, but their language teaching experience. Besides, another point emphasized by Moini (2009) is the role of experience in cognition. The study revealed that experienced teachers tend to pay less attention to grammar teaching than novice teachers do.

The studies conducted in the Turkish context provide some substantial points to take into account. Çakır and Kafa (2013) revealed that the language teachers mostly preferred to teach L2 grammar deductively through GTM and sometimes TPR. Even

though the Ministry of National Education started the project of COC to implement a more communicative-oriented curriculum, the teachers expressed that shared L1, their language learning experience and the practicality of GTM encouraged them to use it in class. Similarly, Uysal and Bardakçı (2014) revealed similar findings and added that time constraints, crowded classrooms, and low motivation prevented them from adopting a more communicative approach. As stated in Liviero's (2017) study, teachers appear to have resistance to adopt new approaches because of cognitive and contextual factors. This kind of inconsistencies was studied by Phipps and Borg (2009) and it is stated that even though teachers may have core (theoretical) beliefs, they may rely on their peripheral (experiential) beliefs because of the necessities arising from the context. The distinction between two belief systems explains the inconsistencies between beliefs and practices. In addition, there is common ground that Turkish EFL teachers have a tendency to implement traditional grammar teaching methods that are based on discrete-point, explicit and deductive instruction no matter what they believe and what they are suggested to do through curriculum (Çakır & Kafa, 2013; Hoş & Kekeç, 2014; Uysal & Bardakçı, 2014). Reasons for this discrepancy are generally attributed to contextual factors such as time constraints, syllabus, students and materials.

Based on this piece of literature and overview, there are a few gaps that constitute the skeleton of this study. First, the studies include substantial dimensions; however, these dimensions studied in these articles are not comprehensive enough in that not all aspects of teacher cognition have been analysed in detail. So, this study focuses on teachers' beliefs, practices, the relationship of beliefs and practices, comparison of this relationship among the teachers, reasons for incongruence, contextual and cognitive factors affecting this relationship rather than working on a specific aspect of teacher cognition such as experience, academic background. Including these dimensions can yield a more comprehensive picture of the institution, which can contribute to the policies of the institution in terms of curricula, in-service teacher education, and materials. Another gap is related to the fact that research findings have not been discussed within the scope of ISLA studies, which means to what extent teachers know and apply what has been recently addressed in the field of second language acquisition. In this sense, this research study aims to provide the interplay between teacher cognition and ISLA from grammar teaching perspective.

METHOD

Research Participant and Data Collection

This study was conducted at a preparatory school of an English medium instruction university in Turkey. The preparatory school where the study was carried out hosts more than 1000 students. The lessons, 24 hours per week, include integrated skills

taught under the title of main course, which means all skills including reading, writing, speaking, listening, grammar and vocabulary are taught by means of a course book and complementary packs. 24 main course lessons are shared by three teachers for each class, and these teachers are expected to keep up with each other and complete the requirements of the weekly and monthly lesson plans. Additionally, these teachers complete 24 hours of teaching in a week in different classes.

Four EFL teachers (four females) working at this preparatory school participated in this study. Year of experience ranges from 1 to 15. The criteria “convenience of participants, their teaching context and willingness” were considered while selecting the participants. Additionally, sample participants were selected among teachers with various backgrounds to have a more comprehensive perspective on the topic covered in this research study (see Table 1).

Table 1

Participants' Academic Background

Name	Taught level	Years of experience	Education
İrem	Elementary	1	• B.A. English Language and Literature
Sezen	Elementary	10	• B.A. English Language Teaching
Ayça	Elementary	2	• B.A. English Language Teaching
Merve	Elementary	15	• B.A. English Language and Literature • M.A. American Culture and Literature

In this sense, two of the participants had to be experienced (over three years), and two of them had to be novice (less than three years). Both for the experienced and novice groups, one of them had to be an ELT graduate, and the other one had to be a non-ELT department graduate. These teachers are teaching at elementary levels. Among those teachers, two of them are graduates of English Language Teaching (ELT) department. The third and fourth ones are graduates of English Language and Literature (ELL) department. As for the year of experience, two teachers can be regarded as novice teachers as their year of experience does not exceed three years, but the other ones are experienced because one of them has been teaching for ten years and the other one has been teaching for fifteen years. After the participants decided to take part in this study, they were informed about the processes and requirements of the research both verbally and inscriptively. As this study is based on an M.A. thesis conducted at Boğaziçi University, all data collections

tools and procedures were reviewed for ethical concerns and approved by Boğaziçi University Institutional Review Board for Research with Human Subjects (application no: SBB-EAK 2018/37; approval no: 2018-38).

When it comes to my relationship with the participants, I could develop a good rapport with the teachers. Particularly, the participants voluntarily wanted to be a part of this study when I mentioned that I was working on teacher cognition. Also, as I had constant contact with the participants even before and after the study, I could interpret their cognition in the light of their personal profiles with which I was familiar, and I could reach them quickly in case of any ambiguity about the data.

Instrumentation

Selection of a small sample consisting of particular units of analysis and the aims of the study led me to use a qualitative case study methodology by employing cross-case analysis (Creswell, 2007; Merriam & Tisdell, 2016). Case study methodology was chosen because it provides a chance for in-depth investigation of a contemporary social phenomenon within the context where the phenomenon and context are bounded (Yin, 2018). Likewise, case study methodology helps researchers to collect data considering the need for in-depth analysis of the multi-faceted aspect of the reality that is related to the context itself (Yin, 2018). For this reason, descriptive, explanatory, and exploratory research questions constitute the skeleton of this study in order to meet the requirements of case study methodology, which aims to have a holistic and naturalistic perspective towards individuals, group practices, and institutional processes and policies (Yin, 2018).

As the main focus is on teachers' in-depth cognitions and their instructional decisions, qualitative instruments can afford to provide an insight into the complex belief systems held by language teachers, which yielded use of three qualitative data collection instruments in a triangulated way within case study methodology: unstructured observation stimulated recalls, and semi-structured interviews supported with field notes, researcher memos, and artifacts. These qualitative data collection instruments were utilised to obtain naturalistic and descriptive data throughout the process inductively with a particular focus on meaning (Bogdan & Biklen, 2003). In this sense, the naturalistic aspect of this case study can offer in-depth contextual information that can support research findings together with descriptive data that take everything into account without skipping even less critical details. The whole process is provided, and the procedures followed in data collection are used in inductive data analysis in order to obtain meaningful and comprehensive themes based on emerging codes. Also, meaning obtained from participants is triangulated with the data to reach a broader perspective to make meaning out of data.

For data collection, unstructured observation, stimulated recalls, and semi-structured interviews were employed, and these instruments were supported with field

notes and artifacts. The very first stage of data collection was unstructured observation during which the researcher was an observer as participant since the researcher's contact with the students was brief, formal and openly classified as observation (Burgess, 2011). Four participants' lessons were individually observed in the two-week period. For each participant, five lessons were observed. The lessons were audio-recorded with the permission of the participants. During the observation, the way grammar was taught was noted down with explanations.

For the second stage of the instrumentation, a stimulated-recall interview was carried out with each participant one or two days after their observed lessons. Each interview approximately lasted 30 minutes. The issues raised during these interviews were mostly associated with their practices in the class. A semi-structured model was employed so that participants could touch upon the issues which were not asked by the participants. This chance enabled participants to have an active role in the research rather than being passive objects (Holstein & Gubrium, 1997). Field notes were used in order to remind the teachers of substantial points occurred during the lessons. Consistent or inconsistent patterns of beliefs and practices, which was based on observed lessons and post-observation interviews, were provided with the teachers and they were expected to reflect upon them by giving the rationale behind their decisions.

The third stage of data collection was post-observation semi-structured interviews. Interview questions were prepared to elicit information about the participants' background learning and teaching profiles. Main questions were raised to have a basic understanding of their takes on grammar teaching and corrective feedback. Interviews were conducted individually soon after the last lesson that had been observed, and each interview took approximately 20 minutes (see Table 2). This instrument was expected to enable me to establish a positive relationship with interviewees by developing a good rapport, which was advantageous for the quality of data (Fontana & Frey, 1994).

Table 2

Instruments, Participants, and Timing of Data Collection

Instruments	Participants	Duration of Data Collection
Observation	4 EFL Teachers	5 lessons (each class)
Stimulated Recall Interview	4 EFL Teachers	30 minutes (each teacher)
Post-Observation Interview	4 EFL Teachers	20 minutes (each teacher)

Data Analysis

For each category of data sources (interviews, stimulated recalls and observation field notes), the data were triangulated and coded through a qualitative analysis software (NVivo 11) in order to reach comprehensive themes to be used for analysis. The analysis process was meticulously carried out in order to obtain encapsulating themes based on the

most frequent and recurring codes for all data sources. The data from the participants were compared to each other inductively through cross-case analysis (Creswell, 2007) to reach more comprehensive findings regarding the setting, focus activity and the participants.

For the beliefs held by the participants and their practices, the data from observation, field notes, stimulated recalls and interviews were analysed in a manner including thematic analysis (Boyatzis, 1998; Yin, 2009). Codification and developing coding system required to go through the data and note down “certain words, phrases, patterns of behavior, subjects’ way of thinking and events that repeat and stand out” (Bogdan & Biklen, 2003, p.161). For the transcription of the interviews and the lessons, *Transcribe* was used. All transcribed data were analysed inductively (Glaser & Strauss, 1967; Silverman, 1993) and cyclically since all stages of instrumentation were interrelated to one another and analysis of one stage was used as a basis for the next stage in a cumulative manner (Sanchez & Borg, 2014). All the data obtained through data collection instruments were triangulated (Miles & Huberman, 1994).

The topics related to the research focus were coded based on these criteria. Additionally, the codes were grouped under appropriate categories for each research focus. These categories of codes were about their beliefs, practices, the degree of consistency between beliefs and practices and contextual factors influencing the relationship between these beliefs and practices.

FINDINGS

The findings inform about these four EFL teachers’ beliefs, practices and contextual factors influencing their beliefs and practices of grammar teaching in accordance with convergences and divergences among them. This cross-case analysis aimed to provide a more comprehensive framework that can enable us to compare what the teachers working in the same institution believe and practise, and to what extent contextual factors affect these beliefs and practices.

Grammar Teaching (GT) Beliefs

What the teachers believe about L2 grammar teaching can be investigated based on four main themes emerged from the data: (1) course book-based beliefs; (2) lack of theoretical knowledge; (3) experience-based beliefs; and (4) inclination for communicative activities.

Firstly, it was noted that Sezen and Ayça have a strong tendency to stick to the course book when they teach grammar, which means they usually follow the procedures suggested in the course book. This tendency to rely on *course book-based beliefs* does not allow them to make use of more autonomous ways to teach L2 grammar. Instead of using

adaptation or a different way to teach grammar, they prefer to depend on the course book as they think it is not necessary to come up with an alternative way to deliver the target structure. Sezen rationalizes her reliance on the course book as follows:

The course book and the other materials are appropriate enough. It includes both pair-work and group work, so I mostly depend on the book. For this reason, there is no room for teaching philosophy. I do not need it. It is important to be able to communicate, so communication is the main concern, not grammar. According to me, fluency is more important than accuracy for this reason (Sezen, Interview 2, 13 Nov 2018).

Even though İrem mostly depends on the course book for L2 grammar teaching, she is in favor of using additional activities to help students to understand and learn better. She states that she is fond of preparing extra worksheets including paraphrasing and rewriting and some games encouraging students to use target structure in a meaningful context. As for Merve, she strongly believes that it is not very effective to depend on the course book completely. She states that L2 grammar can be taught in an alternative way depending on the target structure, students' needs, and timing. She is prone to adapt the way grammar is suggested to be taught in the course book. She also believes that adaptation should not be restricted to the instruction since she thinks grammar activities and exercises provided within the course book may need some adaptation in order to obtain effective outcomes.

Secondly, the teachers were observed to have some characteristics in common in terms of *lack of theoretical knowledge* related to L2 grammar teaching because it is apparent that they lack theoretical knowledge that may constitute the underlying mechanism of their beliefs. No matter what they studied as their majors at university, the teachers themselves state that they do not know or remember the theories, approaches, and methodologies concerning L2 grammar teaching. Sezen and Ayça noted that they do not remember anything that they studied during their pre-service teaching education and they do not benefit from the theories or approaches taught at the university as they forgot them. As for İrem and Merve, they were able to mention a few methodologies even though they graduated from the literature department. İrem mentioned task-based approach and Merve informed about her use of Suggestopedia. Apart from these, they could not provide any further theoretical aspects of their belief systems. In this sense, İrem summarizes her theoretical background as follows:

I don't know many things about the theories. I attended the TESOL certification program, and I read a book written by Jeremy Harmer. Apart from this, I studied some theories for the job interview, but I don't remember them now. As far as I know, I think I have an eclectic approach. I don't use a unique method, and it depends. I like being flexible. (İrem, Interview 2, 20 Nov 2018)

Thirdly, one common belief shared by Sezen, İrem, and Merve is a reference to their *experience-based beliefs* to teach L2 grammar. Merve emphasizes the role of experience as follows:

I do many things without thinking that much. At that moment, I decide on the right thing for them and apply it. I am not an ELT graduate. I graduated from the Literature department. I rely on my experience and intuition, and I do not think it is disadvantageous.
(Merve, Interview 1, 3 Dec 2018)

In contrast to relying on their theoretical knowledge, they acknowledge that they count on their previous experience to teach L2 grammar. Additionally, they inform that it does not happen consciously as they make instant decisions in class based on their previous teaching experiences and they do know what works well. Sezen and Merve have been teaching for more than 10 years; however, İrem also states that she resorts to her previous teaching experience and it is her third year in teaching at tertiary level. As for another novice teacher, Ayça, she does not believe that the way she teaches is based on her previous experiences, which can be due to the fact that it is her first year in teaching at tertiary level. Even though she taught at primary level for two years, her being inexperienced in tertiary level might have kept from resorting to her previous teaching experience.

Finally, it can be noted that the teachers are inclined to teach in a more communicative way because of their *inclination for communicative activities*. They all state that their main objective is to enable the students to communicate in the target language, so they prioritize the communicative aspect of L2 grammar teaching. They believe that communicative activities encouraging the use of target structures can contribute to better learning. Aside from communicative activities to support grammar instruction, Merve touches upon the use of interaction while teaching grammar rules as well. In contrast to Sezen, İrem, and Ayça, she states that she prefers to present the target structure in an interactive and inductive way so that students can learn grammar rules more naturally and effectively. As for the reason for engaging students constantly to communicate, Merve explains that:

I have not questioned myself or the reason for that practice until you asked, it was unconscious. Maybe, we are six siblings. I am the elder one. I had to deal with them, and I knew that I would not be successful by ordering them. I used to make them do something willingly as I do for my children now. As for the students, firstly I try to make them feel eager to do something. They get it; they are not aware that they are learning. They talked to me at that time and so that they could learn unconsciously. (Merve, Interview 1, 3 Dec 2018)

Grammar Teaching (GT) Practices

This section of the results aims to shed light on what the teachers practise in their classes and to what extent these practices compromise with their aforementioned beliefs. Starting with the common practices observed in the teachers' lessons, they include the *use of extra examples, elicitation, controlled grammar practices* and *explicit grammar instruction*. These practices were observed to be used frequently during grammar teaching. As for the unique practices employed by each teacher, Sezen paid close attention to meaning while teaching the target structure in that she focused on the meaning of the structure in different contexts with the aim of having the students internalizing the meaning. İrem was observed to depart from the lesson plan via extra materials prepared to enhance the students' learning. She used some worksheets and made students rewrite some sentences that she had prepared beforehand. Merve employed some practical ways to grab her students' attention, and she tried to engage the students in the activities by relating the grammar practice questions to the students' lives. She also deliberately used L1 in order to urge her students to produce the target structure in L2. Additionally, she was observed to make use of pair-work as a step to prepare the students to have enough speaking material for whole-class speaking activities. When it comes to Ayça, it was noted that she used paraphrasing to make the students practise the target structure. She was also observed to use L1 frequently both for translation and giving instructions. In contrast to Merve's use of L1 consciously, she states that it is not a practice which she considers appropriate. She adds that she resorts to L1 for instructions and translation since she does not know what else to do to teach the target structure as follows:

I think it is not true. I do not think what is correct and what is not in language teaching. I do not know how we can teach without translation. I do not know very well; it is a deficit aspect of me. I thought it would be better to make use of L1 at that time because students look for something concrete and they want a logical reason for grammar. I do not like translation, and I believe it is not true, but I had to use it inevitably. (Ayça, Interview 1, 21 Dec 2018)

Relationship Between Beliefs and Practices

In addition to the similar and different practices performed by the teachers, the degree of consistency between their stated beliefs and instructional practices is another concern of cross-case analysis. In this sense, it can be noted that Merve has the most consistent relationship between her beliefs and practices followed by İrem, Sezen, and Ayça respectively. As there are no divergences from her stated beliefs based on the lessons observed during the study, it can be deduced that there is not a significant gap between what she believes and what she does in the class. She assertively states that she does not implement anything that she does not consider effective and she adds that whatever she did in the class is a part of her belief system. In response to the question about the reason for holding these beliefs, she bases her beliefs and practices on her experience, intuition, and improvisation rather than her theoretical knowledge. Likewise, İrem was observed to perform consistently considering her stated beliefs about L2 grammar teaching. One

aspect that makes her case different from Merve's is her being less decisive and sure about the reason for her beliefs since she had difficulty in explaining the reasons for her instructional decisions and elaborating on them. The reason why she hesitated to rationalize her beliefs might stem from her lack of theoretical and experiential knowledge about L2 grammar teaching. As for Sezen, even though her practices are mostly aligned with her beliefs, there are some incongruences related to her belief highlighting the importance of communicative activities. Despite the importance she attaches to the communicative aspect of grammar teaching, Sezen was observed not to adapt the activities to pave the way for communicative activities. Although there were some questions for which the students were eager to speak, she preferred to keep it short and continue with the grammar exercises. She states she does not know why she preferred to keep it short, which indicates an unconscious decision made in the class as follows:

Something happens to me when I go into the class. Even though I stick to the overall lesson plan, I do not have any idea about why I make some decisions about the flow of the lesson. Especially the detailed points that you declared. I do not decide on these decisions by myself. The class dynamics lead me to do so. As a result, I teach and interact differently in each class despite the same coursebook and the same content. I am not sure whether it is good or bad (Sezen, Interview 1, 7 Nov 2018).

Finally, it was noted that Ayça failed to perform in line with her stated beliefs since she does not believe the practices that she carried out in the class represent her belief system. She used L1 translation, L1 instruction and she neglected communicative activities that could have helped the students to produce the target structure. One point noticed in her case is the fact that her practices resemble her previous language learning experience, which shows that she might be under the influence of her own language learning experience because she lacks theoretical and experiential knowledge related to L2 grammar teaching. Moreover, she puts forward that she is not aware of her decisions in the class, which can be regarded as an indicator of lack of cognitive awareness about her actions.

To sum up, while there are some common practices that are performed by the teachers correspondingly, the teachers may differ from each other in terms of their preferences and the degree of the relationship between their beliefs and practices. There are two points that have to be noted down about their practices: practices based on experiential knowledge and unconscious decisions. The former one is evident in Sezen, İrem and Merve's cases in terms of the fact that they base their practices on their previous teaching experience and trial and error experiences. Also, the scope of the stated beliefs is limited compared to their practices and their explanations about these practices, which shows that their declarative knowledge is not as comprehensive as their procedural knowledge because of their reliance on their experiences. Considering the role of experiential knowledge, it can be seen that the most experienced teacher (Merve, 15 years)

performed the most consistent practices compared to less experienced teachers. As for unconscious decisions, it is a phenomenon which was observed in all of the teachers since they all state that they may make some unconscious decisions depending on the context regardless of a particular reason. While Sezen, İrem, and Ayça point out that they do not know why they make this kind of decisions, Merve relates it to her intuition.

Contextual Factors Affecting Beliefs and Practices

There is a variety of contextual factors stated by the teachers. The most frequent one is *time constraints*. Sezen, Merve, and Ayça think that timing problems and pacing restrict them to make more autonomous decisions. However, it was observed that Sezen and Ayça did not prefer to adapt the materials for communicative purposes in spite of having enough time. In contrast to them, Merve was able to adapt the material in accordance with her will. However, she states that it may not be possible to make autonomous decisions under time pressure. Another contextual factor is the *learners' profile*. Sezen acknowledges that the students are from technical departments, so they demand more analytical teaching, which hinders having a more communicative and creative learning environment. Likewise, Ayça complains about students' not being autonomous learners and their reluctance for self-study, which can be associated with her previous learner profile as she states that she learned the language mostly on her own. Apart from these, Ayça touches upon the *different dynamics of classes* in that she performs differently in her two classes, which can be considered a factor that changes teachers' practices regardless of their beliefs. Additionally, she complains about the *lack of technological aids* since she cannot make use of online tools. As for Merve, she focuses on *materials and standardization problems* stemming from these materials. As she is in favor of adaptation of the materials, she thinks that she does not have the liberty to adapt and change the materials in accordance with her beliefs. This is because the instructors are expected to cover the same material in a similar way for the sake of standardization. Finally, Ayça mentions that *the number of exams and exam coverages* restrict her to make autonomous decisions. Alongside this, she also complains about *overcrowded classrooms*. In contrast to her colleagues, Ayça states that contextual factors do not have a detrimental effect on her cognition as follows:

I think I am not capable of criticizing the curriculum or pacing because I am not a graduate of ELT department. I can apply what I have in mind. There is not a contextual factor affecting me. On my first days at school, my partner was very experienced. We used to share a class, and I remember I wished she would teach some grammar structures. I felt I was not qualified enough to teach complex grammar structures. The problems were about me, not the school. I am young, not experienced. I am afraid of not being taken seriously by students.
(İrem, Interview 2, 20 Nov 2018)

In conclusion, the teachers believe that these external factors detrimentally influence the way they teach. As it can be deduced from the aforementioned answers, contextual factors

and the degree of their influence on beliefs and practices can vary from one teacher to another.

DISCUSSION

The purpose of this study was to (1) explore the instructional practices that language teachers use to teach L2 grammar, (2) investigate their beliefs regarding L2 grammar teaching, (3) report the degree of consistency between their beliefs and practices and the reasons for inconsistencies and (4) shed light on the contextual factors impacting their beliefs and practices based on the interviews conducted with the language teachers, observation sessions and stimulated recalls carried out after these observations. The study was stated to be significant within the consideration of the fact that recent SLA studies in L2 grammar teaching lack comprehensive and generalizable results in language teaching since teacher cognition as a variable is not integrated into the studies despite its substantial effect on language teaching and learning. The second significance of this study was attributed to the necessity to carry out more qualitative studies in the field of language teacher cognition because of the fact that personal beliefs and practices in language teaching can vary significantly from one teacher to another. The third significance was related to the possible opportunities from which both the institute and language teachers can benefit.

To start with what the study suggests within the perspective of L2 grammar teaching based on the literature presented before, this study makes it possible to discuss the findings based on the literature about SLA and LTC. There have been a great number of studies about whether grammar should be taught (Spada, 2007; Gass & Varonis, 1994), comparison of inductive grammar teaching to deductive approach (DeKeyser, 1993), use of metalinguistic in grammar teaching (Garrett, 1986), effectiveness of grammar practices (Ellis, 2010), effectiveness of isolated form-focused instruction (Spada & Lightbown, 2008), and successful outcomes of integrated form-focused instruction (Elgün-Gündüz, Akcan, & Bayyurt, 2012). However, the findings reveal that the teachers are not aware of what is being discussed in the field, which hinders adopting a theoretical perspective towards teaching. As they were all informed about the notions related to SLA, it is possible to argue that they lack theoretical knowledge to construct their theoretical beliefs. Similarly, the studies conducted with the aim of investigating the aforementioned issues lack a teacher perspective as a variable, which might result in various implications in real classes differing from the study results. This variation is an indicator of the fact that language teachers substantially differ from one another and they may perform completely differently under the assumption that they teach a specific grammar structure through a particular method.

When it comes to the discussion of this study based on related studies conducted within Language Teacher Cognition (LTC) framework, there are both consistent and inconsistent results compared to existing literature. For the degree of consistency between

language teachers' beliefs and practices, some studies indicate that language teachers can have some beliefs and perform them consistently (Farrell & Lim, 2005; Sanchez & Borg, 2014). Farrell and Lim put forward that the teachers performed consistently except for a few divergences stemming from time constraints and reverence for traditional grammar teaching. According to Sanchez and Borg (2014), the consistent behaviours were the result of a teaching environment where there were not any restrictions that hindered the teachers. It is also stated that the teachers were able to come up with complex rationalizations behind their beliefs. However, this study reveals that there are both consistent and inconsistent relationships between beliefs and practices. While two teachers performed consistently (İrem and Merve), there are some inconsistencies in the other teachers' cases (Sezen and Ayça) stemming from cognitive and contextual factors. Also, it can be noted that the teachers failed to relate their consistent beliefs to complex rationalizations in contrast to the findings in Sanchez and Borg's (2014) study since they mostly based the reasons on their previous teaching experiences.

As for the inconsistencies, it can be said that there is a tension between their beliefs and practices. This tension can be related to the tension between core and peripheral beliefs (Phipps & Borg, 2009). While the former one is related to the broader underlying belief system of teachers (theoretical knowledge), the latter one (experiential knowledge) is a more powerful belief system which affects the instructional decisions which teachers make for teaching practices (Phipps & Borg, 2009). However, one difference from this tension that is conceptualized above is the fact that theoretical knowledge is quite limited compared to experiential knowledge, which results in instructional practices performed by relying on previous teaching (Sezen, İrem, and Merve) and previous learning experience (Ayça). Overall, it can be deduced that stated beliefs and instructional practices can be in line with each other, but they may also be at odds depending on some personal cognitive factors or external factors. Additionally, the reason for incongruences may not be rational as shown in some studies since language teachers may not be cognitively aware of the rationale behind some beliefs and practices.

Another dimension in LTC is language teachers' background and its effects on their teaching. The components of this background that is discussed in this study include teacher education and experience. In this sense, Graus and Coppen (2016) suggest that both graduate and undergraduate student teachers give reference to the academic courses that they have been taking for the factors influencing their beliefs and practices. However, none of the teachers in this study made such a connection between their cognition and academic courses taken at the university. Even though Sezen (experienced) and Ayça (novice) are graduates of English Language Teaching (ELT) department, they failed to refer to their academic background, which shows pre-service teacher education may not have a visible role in language teachers' belief system. Possible reasons for this deprivation can be related to forgetting the content of the courses and preference to rely on teaching experience. Besides, it can be because of not internalizing the theoretical and practical

knowledge that could have been acquired at university. Their educational background did not yield a significant difference compared to Merve (experienced) and İrem (novice), who are not graduates of ELT department.

Similarly, Borg and Burns (2008) show that the teachers prefer to teach grammar in an integrated way although it is claimed that teachers teaching adult learners tend to teach grammar explicitly (Schulz, 1996). It is also added that the teachers rely on their practical and experiential knowledge rather than basing their beliefs on an SLA perspective, which shows language teacher may construct beliefs by teaching practices. Considering the role of experience Moini (2008) states that experienced teachers pay less attention to grammar teaching compared to their novice colleagues. However, this study indicates that experience is not a significant factor inducing paying less attention to grammar since all the teachers prioritized grammar teaching and spent a similar amount of time on grammar teaching. Similar to what Moini (2008) puts forward, one experienced teacher frequently resorted to adaptation to make students speak more and one novice teacher used extra worksheets to support students' learning. However, the other experienced and novice teachers resemble each other in that they delivered the target structure in a similar way, which restrains us from making a generalization foregrounding that experienced teachers do not teach grammar as much as novice teachers do.

Differing from teaching experience, the learning experience is claimed to have a role in shaping language teachers' belief system (Liviero, 2017). However, there was not a strong indicator of the effect of the previous language learning experience on the teachers' teaching. The teachers also did not make such a connection between their actual teaching and learning experience. Nonetheless, one novice teacher (Ayça) expects students to make an effort to learn the language on their own by self-study, which was noted as an experience that she employed when she was learning the language. This attitude can be regarded as an effect of previous language learning experience since she thinks it is an effective way to learn the language. In this sense, it can be stated that educational background, teaching and learning experience do not solely induce a significant difference among teachers.

Contextual factors arose as detrimental factors preventing the teachers from building consistent relationships between teachers' beliefs and practices. Catching up with the syllabus and preparing students for exams and time limitation are considered some contextual factors hindering language teachers (Nishimiro & Borg, 2013). Likewise, this study revealed that time constraints, materials, exams, lack of teacher autonomy, standardized syllabus and various class dynamics might negatively influence the way the teachers perform. These detrimental factors can be taken into account by administrators in order to reduce incongruences by providing a more plausible learning environment for the teachers.

As for the studies conducted in Turkey, Çakır and Kafa (2013) revealed that the teachers were inclined to use Grammar Translation Method (GTM). This divergence from the curriculum was related to several reasons including the teachers' lack of knowledge in Communicative Language Teaching (CLT), their previous learning experience, the inconvenience of the materials, shared L1 usage and the practicality of GTM in crowded classes. These findings are in line with what this study suggests in that the inconsistencies between beliefs and practices stem from some cognitive and contextual factors such as lack of theoretical knowledge, the inconvenience of the materials, shared L1. The previous language learning experience was found to influence the teachers. For instance, one teacher (Ayça) was under the influence of her previous learning experience, and she expected the students to learn on their own, which is not congruent with institutional curriculum objectives. Another study conducted by Uysal and Bardakçı (2014) touches upon consistent beliefs and practices of language teachers by showing that the teachers prefer to teach grammar in traditional ways through L1 and this practice is considered to be aligned with their stated beliefs despite the requirements of the curriculum based on CLT. Unlike these findings, this study indicates that the teachers have a tendency to teach grammar in communicative ways, but they may diverge from these beliefs in some cases, which results in inconsistencies.

One substantial point that can make this study different from above-mentioned studies is the fact that this study did not only focus on the degree of consistency between beliefs and practices, but also it aimed to reach more comprehensive findings including what language teachers think about SLA theories and approaches to bridge the gap between SLA and LTC by revealing their cognitive state of mind. This study distinctively shows that what language teachers know about SLA is quite limited and this lack of knowledge is compensated via experiential knowledge and this experiential knowledge constitutes the teachers' belief systems. A further insight that arose from this study is the lack of teachers' awareness of their instructional decisions. This deprivation may shed light on a deeper understanding of language teachers' mind since they tend to take many instructional decisions without having to base them on a particular belief. Another point that can be mentioned is the notion of inconsistencies stemming from contextual factors (Çakır & Kafa, 2013; Uysal & Bardakçı, 2014; Hoş & Kekeç, 2014). However, these factors can be minimized with the help of personal interventions such as adaptation, extra materials, and extra activity types as it can be seen in the teachers' cases.

LIMITATIONS AND RECOMMENDATIONS

One of the limitations of this study is the number of participants. More teachers from different backgrounds in the institute could have been invited to participate in the study. The inclusion of more teachers could have yielded a more comprehensive perspective towards the teachers' beliefs and practices. For this reason, prospective studies can

consider including more teachers unless there is a time constraint because of researchers' schedule. Another limitation is about the time allocated for observation sessions. Each teacher was observed for five lessons, which could have been increased in order to collect more data about their grammar teaching practices. For further studies, the number of observation sessions can be increased to collect more authentic data that can tell more about language teachers' practices.

The other limitation is the absence of interviews with administrators as they are the stakeholders of the institute and they have a substantial role in policy-making that can influence the contextual factors that were mentioned to affect the teachers detrimentally. As this study includes perspectives from teachers, how the administrators perceive the issues that are discussed in the study could have paved the way for a more comprehensive perspective towards teacher cognition.

CONCLUSION

To conclude, this study aimed to provide a particular perspective towards what language teachers believe concerning L2 grammar teaching, how they perform considering their stated beliefs and cognitive and contextual factors influencing their instructional decisions in order to contribute to the growing body of research conducted both in SLA and in LTC. This study also intended to bridge the gap between SLA and LTC by providing a reflection of how theoretical knowledge is perceived by language teachers and to what extent their implementations are aligned with what SLA suggests. As a possible contribution LTC, this study aimed to offer a comprehensive framework to have a better understanding of teacher cognition rather than relying on a single variable. In this sense, I paid attention to consider the variables studied in the literature such as teaching experience, previous language learning experience, and educational background. Selection of participants within the scope of these variables enabled me to compare and analyse the effects of these variables together compared to the studies focusing on the impact of a single variable.

With regard to these concerns, the findings show that teacher cognition is a complex theoretical framework in that what language teachers believe and how they instruct might compromise with each other in some cases; however, they may differ from one another since cognitive factors such as experience, personal views and insights, theoretical and practical knowledge and teaching orientation influence their decisions differently. The way they are affected by contextual factors such as time constraints, syllabus, and pacing, materials, students, and exams can be regarded as the other reason for the divergence. These cognitive and contextual factors also have a role in individual inconsistencies observed in language teachers. Based on what is discussed, this study helped the teachers to go through a cognitive process through which they were able to reflect on their beliefs

and practices. Consequently, apart from the possible academic contributions to the field, the findings obtained from the study can be used by the institutional administration to take some actions in order to improve the conditions that detrimentally hinder the teachers from implementing what they believe.

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