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Summary

The relationship between cognition and language learning has an important role in language teaching environments. In recent years, an increase in the number of research focusing on the role of cognition and cognitive linguistics in language learning has been observed. Within this framework, various studies grounding on distinct views have been conducted. These studies are twofold: at one side lie the studies concentrating on concepts of cognition such as attention, memory, and perception; and on the other side the ones focusing on cognitive linguistic theories.

Studies on concepts of cognition concentrate on the relation between cognition and language learning (Robinson, 2001; Robinson & Ellis, 2008). These studies exhibit the relation between metacognition, retention, memorization, perception and cognitive processing in second language learning.

Apart from these, teaching techniques proposed in the light of cognitive linguistic theories and principles are accepted as effective ways in language education. These studies provide basis for studies on different dimensions of a vocabulary-grammar continuum (Boers & Lindstromberg, 2008; Holme, 2009; Littlemore, 2009; Tyler, 2012). They focus on theoretical aspects such as pedagogical grammar (Achard & Neimeier, 2004; De Knop & De Rycker, 2008; De Knop, Boers & De Rycker, 2010; Dirven, 1989; Hubbard, 1978; Hubbard, 1994; Pütz, Niemeier & Dirven, 2004; Taylor, 1993); image schemas (Makni, 2014); modals (Tyler, 2008); frame semantics (Atzler, 2011); phrasal verbs (Condon,

2018); conceptual metaphor and metonymy (Berendi, Csaba & Kövecses, 2008; Deignan, Gabrys & Solska, 1997; Fang, 2014; Li, 2002) and idioms (Kövecses & Szabo, 1996; Kövecses, 2001; Li, 2010).

This book entitled "Cognition and Language Learning" edited by Sadia Belkhir includes proceedings of the Cognition & Language Learning Symposium held in February 2019 in Mouloud Mammeri University, Tzi Ouzou. In the book, there are studies that take the interdisciplinary approach between Cognitive Linguistics and education and put forward the relation between cognition and language learning. In the studies; issues such as metacognitive awareness on reading narrative texts, vocabulary attrition among multilinguals, the role of MIP in promoting EFL learners' cognitive ability, perception of phonetic units, vocabulary retention and memorization through the use of online sources, the role of attribution theory in perceptions of success and failure, anxiety and cognitive processing in EFL, the perceptions of code switcing in EFL classes are discussed.

In Chapter 1, Sadia Belkhir gives information on the interrelationship between cognition and language learning. Firstly, Belkhir gives a brief description of the transition from behavioral to cognitive theories of language in the literature. After that, she presents the literature on cognition and language learning. Lastly, Belkhir presents the chapters in the volume by drawing attention on how distinct point of views in cognitive view contribute to the field of language education.

Metacognitive awareness, defined as knowledge of text processing, conceptualization and adjusting strategies, is important in promoting language skills. In Chapter 2 Kamila Ammour conducted a study on EFL students' metacognitive awareness when reading narrative texts. In the study, the importance of reading skills is emphasized and the interaction between text comprehension and background knowledge in conceptualization is underlined. Ammour asserts that by metacognitive awareness reading strategies can be controlled and adjusted. She conducts the study in the light of this knowledge in Algerian contexts. The participants are 3rd year 75 undergraduate EFL students at Maolud Mammeri University of Tzi-Ouzou. The study investigates narrative text reading ability and asks whether the students are aware of metacognitive strategies with the task of reading narrative texts in different genres or not. In order to reach her aim the researcher uses a questionnaire and finds out important results. The results show that participants are successful in word attack strategies when reading narrative texts. Besides this, the correlation between text genre and strategy use is observed. In other words, the participants use the same strategy among all text genres and this shows that they see reading as decoding rather than interpretation. When Ammour analyses the strategies used, she finds out that the participants prefer "planning" rather than "monitoring" and "evaluating" strategies, which are used in post-reading. These results indicate the lack of metacognition and unawareness of reading strategies in narrative texts. This creates a challenge for EFL teachers. The author gives some recommendations to EFL teachers such as giving importance to explicit instruction, focusing on procedural knowledge and generic structure of texts, diversifying reading texts in terms of text type and objectives. Reading which is a cognitive process is important in both L1 and EFL contexts. As Garner (1988) asserts, while cognitive skills are necessary to perform a task, metacognition is necessary

to understand how the task is performed. This makes this study valuable for it focuses on the metacognition of EFL learners. More detailed future studies can be conducted in order to show a wider perspective in the needs for metacognitive awareness in reading different genres.

In Chapter 3, Fatima Zohra Chalal focuses on the vocabulary attrition of Kabyle multilinguals who use English as L4 and who are no longer using English. In the study, language attrition, which is the decay in language skills, is investigated in terms of foreign language attrition (FLA). The study is grounded on Nelson's (1978) The Savings Paradigm that rests on the idea that after learning a word, there are residues of knowledge that can be employed to reactivate it. Chalal conducts experiments on vocabulary attrition and the results of the experiments reveal that the English vocabulary is recalled easier and faster. She shows that there are three levels of activation in the remembering process: recall level (higher), the recognition level (lower), and if the threshold falls below the recognition level, the word is said to be lost. The study shows that the participants are more successful in recall process than acquisition process. The forgotten words are recalled and the unknown words are learned. As a result, Kabyle multilinguals who use English as L4 are faster in vocabulary learning. Language attrition is a crucial phenomenon in sociolinguistics studies (Schmid, 2011). In this regard, the study is notable since it focuses on the concept of language attrition in foreign language contexts, which gained importance in recent years in multilingualism research.

Cognitive linguistic view centers its ideas on the metaphoric nature of language (Lakoff & Johnson, 1980). In Chapter 4, Sadia Belkhir draws attention to the role of metaphors on educational and academic discourse. Belkhir tests the role of MIP (Pragglejaz Group, 2007) in promoting EFL learners' ability to identify academic discourse in a four-stage procedure. In the study, she first gives a literature review and presents the methodology of the research. Belkhir conducts two experiments with post-graduate students at the Department of English at Mouloud Mammeri University in which she tests the effect of MIP knowledge on the process of metaphor identification. She also proposes a lesson plan on metaphors within cognitive linguistics view. By this way, she tests whether there is an increase in the proficiency level in the participants' metaphor identification ability within academic texts. Studies concentrating on metaphor analysis in educational discourse gained attention in recent years (Cameron, 2003; Cameron & Low, 1999; Wan & Low, 2015). In addition to this, metaphor has an important role in both daily and academic discourse, which shows the metaphoric nature of language. This study is remarkable in cognitive linguistics and language teaching field, since it focuses on metaphor analysis and uses MIP for educational purposes for the first time. Moreover, the researcher teaches metaphor to EFL students which is important for their academic development.

In Chapter 5, Georgios Georgiou investigates the perception of Greek vowels by Arabic-Greek bilinguals who live in Cyprus. The participants of the study are 15 female native speakers of Egyptian Arabic who have been learning Standard Modern Greek as L2 between ages 18 to 24. In order to reach the aim of the study, the participants are asked to complete a Greek vowel assimilation and an AXB discrimination test. The discrimination

test is also completed by a control group consisting of Cypriot Greek speakers. The results of the study show that L2 learners of Greek assimilate pairs in a single category, which is called "Category Goodness difference" assimilation type. That is the participants assimilated the Greek stressed vowels /i e/ and the unstressed /i/ to the Egyptian Arabic phonological category /i/ while the Greek stressed and unstressed vowels /o u/ are assimilated to the Egyptian Arabic category /u/. In addition to this, Georgiou observes a weak discrimination of the Greek stressed /i/-/e/ and stressed-unstressed /o/-/u/ vowel contrasts whereas the Greek unstressed /i/-/e/ is discriminated more successfully. As a result, Georgiou reaches two main conclusions; the first is a strong influence of the listeners' native language on the perception of the second language vowels. Secondly, the researcher observes a significance of the role of stress in second language perception. He concludes that the results of the assimilation and discrimination tests show an interference of the learners' L1 in the L2 due to phonological and phonetic differences between the vowel inventories of the two languages. He proposes future studies, such as investigating the perceptual patterns considering the effect of other factors such as age, L2 proficiency level and gender. This study is valuable, because it concentrates on the speech perception of phonetic units of L2 learners, which has not been investigated too much.

The development in information communication technologies has brought the opportunity to use technology in teaching environments by using digital games or digital flashcards. These tools are useful especially in vocabulary retention and memorization (Garrett, 1991). In Chapter 6, Amel Benaissa investigates the role of Quizlets and digital flashcards on EFL learners' vocabulary retention and memorisation skills. For this, Benaissa tests the effect of digital flashcards and online Quizlets on students' acquisition of the three aspects of vocabulary, which are passive vocabulary (receptive knowledge), control active vocabulary and free active vocabulary (productive knowledge) under three research questions. In order to answer these questions, she first gives a brief literature review on Second Language vocabulary acquisition, cognitivism and ICTs, and then the use of Quizlets for vocabulary learning. The participants are 30 first-year university students at Mouloud Mammeri University of Tizi-Ouzou, Algeria. A quasi-experimental research was conducted with an experiment and control group. The students' improvement was evaluated by means of a pre and post vocabulary test. The computer and the mobile version of the Quizlet website was introduced to the experimental group participants. The three aspects of their vocabulary acquisition was tested. The participants in the experiment group were more successful in the passive and active control vocabulary, however no significant improvement was noticed in their active free vocabulary test scores. As Benaissa states this study has some limitations, however broader generalizations can be made with various age groups and language levels. When we consider recent developments in the world, especially after the Covid 19 pandemic, the use of technology in language teaching has gained a remarkable importance. This study proposes a resource that can be used in a computer-assisted language learning (CALL) environment. This research is quite crucial when considering this process.

Educational and social psychology plays an important role in understanding individuals' perceptions of the causes of their behaviour. Within this insight, in Chapter 7,

Nora Achili tests the EFL learners' perceptions of success and failure through attribution theory. Attribution theory is defined as a theory which glosses the intrinsic and extrinsic reasons learners attribute to their success or failure and helps them succeed in their learning and examinations (Heider, 1958; Weiner 1985, 1986). This way, attribution theory makes people reach a better understanding of their environment and gives a chance to change their future behaviour according to the negative or unsuccessful events they experience. This theory is used in teaching environments in order to promote the students' past experiences of success and failure in learning on their future performances. In her study, Achili aims to analyze the effect of the attribution theory in language learning in order to build grounds on the importance of perceptions of language learning and achievement in an Algerian context. She asks two research questions in order to reach this aim. After a brief literature review, she gives details on the methodology. In the study, she analyzes the attributions of Algerian EFL learners through a causal attribution questionnaire including 28 items on 62 advanced students of English at the University of Boumerdes in the light of Weiner's model. The results of the study show that learners attribute their success more significantly to internal factors such as high motivation and personal effort, whereas failure is related to external factors such as task difficulty, lack of effort and teachers. Considering these findings, Achili gives recommendations for teachers, educators, researchers and institutions to handle failure and increase motivation. The researcher concludes that the uncontrollable dimension of motivation and the unstable nature of effort can represent a real threat to learners' consistent successful performance. Within this insight, the researcher draws attention to the importance of motivation in language learning and recommends teachers to eliminate uncontrollable and unstable internal reasons. The study is important for it displays the role of teaching strategies and programmes in increasing success and reducing failure in language classes. It is also important since the study is one of the few studies focusing on attribution theory in Algerian context.

There are various cognitive factors that affect language learning such as aptitude, individual differences, intelligence or learning strategies. Besides, there are also affective and emotional factors such as anxiety, motivation, self-confidence and self-esteem. In Chapter 8, Katia Berbar focuses on language anxiety by emphasizing the importance of the views of Horwitz et al. (1986). This study examines the correlation between foreign language anxiety and cognitive processing among Algerian EFL University students. In language learning, anxiety occurs at three stages, which are input, processing, and output. In her study, Berbar determines the degree of anxiety at each stage and elicits a clearer understanding of its impact on cognitive processes. The participants are 65 first-year students learning EFL at the University of Tizi-Ouzou, Algeria. A Likert questionnaire is designed to measure the levels of anxiety during the different stages of the foreign language learning process. The results of the study show that the participants suffered from high levels of input anxiety, processing anxiety, and output anxiety, and indicates that anxiety is damaging at each stage. At the input stage, anxiety causes problems in understanding vocabulary items, at the processing stage it impairs cognitive ability and at the output stage, causes impairment in the retrieval of the old knowledge and communication. The researcher concludes that anxiety effects learners' ability of

processing information at each stage and recommends language teachers to be aware of their students' emotional states and take measures. This research is quite a valuable one since it dwells on the affective factors in learning a language, which is a significant point in learning process.

Code-switching is known as a pervasive and important phenomenon in bilingual and multilingual contexts. It also draws attention in foreign language contexts. In Chapter 9, Hanane Ait Hamouda investigates the students' perceptions on code-switcing in EFL classes and tries to figure out whether the students consider the non- or near-exclusive use of English as a hindrance in the cognitive process of producing English. The study is conducted with 27 second-year master's students enrolled in the Language and Communication Programme in the Department of English, at Mouloud Mammeri University in Tizi-Ouzou, Algeria. The participants are selected randomly from multilingual individuals. The data is collected using a questionnaire composed of closed and open-ended questions which has questions seeking to find 1) students' attitudes towards code-switching in EFL classes and 2) whether they perceive code-switching as an obstacle altering the cognitive process of English production. The data is analyzed quantitatively and qualitatively. The results of the study show that the students perceive code-switching in EFL lessons positively and they accept it as a communication strategy. Furthermore, code-switching in EFL classes does not alter students' language production process. Code-switching is a natural phenomenon that often occurs in multilingual context. This study skillfully emphasizes the role of code-switching in foreign language contexts.

Evaluation

This volume is a collection of papers showing the relation between cognition and language learning. It makes a valuable contribution to the field of applied linguistics not only for focusing on different perspectives in the interrelationship between cognition and learning process but also by showing how cognitive linguistic theories and principles can be applied to teaching environments. As a whole, the volume shows a variety of cognitive aspects such as metacognition, vocabulary attrition, metaphor identification, perception, vocabulary retention, memorization and cognitive processing involved in language learning and how important a role each aspect plays in learning process. Each chapter in the volume focuses on a distinct dimension of cognition and shows how theoretical implications can be used for practical purposes. Besides, it is possible to find a variety of information on distinct theories, methods that approaches which can be applied in foreign language classrooms. The chapters are organized in a coherent way; they give an abstract which introduces the study, an introduction followed by a brief literature review, a reliable methodology and analysis. The chapters discuss the results in an understandable and reasonable way.

As a result, this volume achieves its goals in showing the relation between cognition and language learning. Although most of the authors conduct their study in Algerian context and use a limited number of participants to reach generalizable results, the volume is quite a valuable resource for researchers, teachers, post-graduate students and anyone interested in the relationship between cognition and language learning.

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