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Review of Child Second Language Acquisition (SLA): Examining Theories and Research

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ABSTRACT

Within the field of second language acquisition (SLA), there has been much less research undertaken with children than with adults, yet the two cohorts are quite distinct in characteristics and in their learning processes. This article provides a review of child SLA research, particularly the research with a pedagogical focus. We describe a series of studies, including those informed by different theoretical perspectives (interactionist and sociocultural), in different instructional settings (i.e., second language, foreign language, immersion, and content and language integrated learning [CLIL] contexts) and using different research methodologies (longitudinal, case study, experimental, and naturalistic). We begin by highlighting the importance of age as a factor in SLA research, presenting studies that have focused on the differences existing between younger and older learners. We also consider interventions that can support language learning—including form-focused instruction and the use of tasks. We finish by presenting a proposed change in the way that research with children is conducted.

INTRODUCTION

Although second language acquisition (SLA) research has mostly focused on adults, in recent times there has been a small but growing body of research on adolescent and child second language (L2) learners (e.g., Enever, Moon, & Raman, 2009; Muñoz, 2006a, 2006b; Nikolov, Mihaljević Djigunović, Mattheoudakis, Lundberg, & Flanagan, 2007; Philp, Oliver, & Mackey, 2008). Even so, it is still "relatively rare to find reviews and overviews of SLA that deal specifically with child SLA" (Philp et al., 2008, p. 3). This article is an attempt to address this issue.

One key premise of this review is that child SLA differs significantly from adult SLA, having its own questions and issues (see Paradis, 2007, p. 387). This rationale was clearly illuminated by Mackey and Gass (2005), following Thompson and Jackson (1998), when they claimed that "second language research must keep in mind that children cannot be treated just like adult research subjects.

Because their capabilities, perspectives, and needs are different, children approach the research context uniquely and encounter a different constellation of research risks and benefits from their participation" (p. 223).

Although research on adults has dominated the field, one early SLA paper to appear was that by Dulay and Burt (1974), in which the researchers examined the acquisition order of L2 morphemes by 60 Spanish-speaking and 55 Chinese-speaking children. Other L2 child-focused studies followed: Wong-Fillmore (1976) examined the strategies of kindergarten children as they learned English naturalistically; Ellis (1984) qualitatively examined the use of formulaic expression by young immigrant children; Sato (1984) followed two Vietnamese boys, ages 10 and 12, as they acquired English; Swain's (1985) work on comprehensible output was undertaken in schools that implemented an immersion approach; and in 1988, Chaudron detailed work on classroom interactions. In 1993, Lightbown and Spada published a seminal text: *How Languages Are Learned.* This book contains a large number of examples using data from child L2 learners. With a few notable exceptions (some described below), in the period that followed, the type of investigations undertaken with children generally focused on constructs that had already been investigated in adult SLA. In more recent times, however, child SLA researchers have been expanding their focus and examining aspects unique to younger learners and to the contexts in which they learn language. In addition, these researchers are also challenging the way research is done with this cohort. Pinter and colleagues (Pinter, 2014; Pinter, Kuchah, & Smith, 2013; Pinter & Zandian, 2014), for example, have suggested doing research with children, rather than on children, that is, taking into consideration children's perspectives and opinions.

Although there have been studies that documented naturalistic L2 (e.g., Day & Shapson, 1991; Ellis & Heimbach, 1997; Sato, 1984) and bilingual acquisition by children (Nicholas & Lightbown, 2008; Schwartz, 2004; Unsworth, 2005), including accounts of the processes inherent in child SLA (Ito, 1997; Iwasaki, 2008; Pienemann, 1998), an examination of the literature shows that most research undertaken with child L2 learners concerns classroom learning or laboratory-based studies that have direct application to pedagogy. Therefore, a particular focus of the current review is child SLA research that has been undertaken in different instructional settings and for different types of learners, where the findings have direct implications for classroom teaching. Specifically, we will present research on child SLA carried out in the L2 (e.g., English as second language [ESL]), and foreign language (e.g., English as foreign language [EFL]) settings, including research carried out in immersion and/or content and language integrated learning (CLIL) classrooms. We will outline examples of research undertaken in these different contexts, highlighting the importance of not generalizing claims across all settings. While reviewing this research, we will also consider different approaches that have been shown to benefit child SLA, such as form-focused instruction and the use of tasks. Finally, we will consider how children can become co-researchers (Pinter et al., 2013). We have chosen exemplar studies to represent the various theoretical perspectives and different empirical approaches that have been used in this body of research. First, however, we begin this review by exploring the

issue of age—a factor that is of considerable significance to SLA generally and an important component of child L2 research.

AGE AND CHILD SLA

Fueled in part by debate about when it is best to begin learning a language, age is a factor that has played a significant role in child SLA research (see García Mayo & García Lecumberri, 2003). Using evidence based on the critical period hypothesis (Lenneberg, 1967)—notably emerging from first language (L1) studies—and then drawing on L2 ultimate attainment research (Abrahamsson & Hyltenstam, 2008; Muñoz, 2014a), researchers have claimed that the younger learners begin, the higher the attainment they will achieve in their L2. However, more recently, some caution has been expressed in this regard. DeKeyser (2013) and Muñoz (2014a), for instance, suggested that there is a need to assess the potential benefits of learning a foreign language at an early age. From a pedagogical perspective, there is also a need to investigate how best to teach these young learners and what conditions are facilitative of their learning. This is because it is not sufficient to apply the findings from the extensive body of adult SLA research and use it as the basis for child directed instruction (Oliver, 2002).

Oliver's claim emerged from her work on child interaction, which was initially based on Long's (1983) interactionist perspective, in which he proposed that SLA was facilitated by learners engaging in meaningful communication with others. In 1998, Oliver undertook a large-scale study to examine the way children ($n = 192$) worked interactionally in different types of dyads—NNS–NNS, NS–NNS, and NS–NS (NS = native speakers; NNS = nonnative speakers)—to complete one-way and two-way language tasks. Using Long's (1983) categories, she explored if and then how children negotiated for meaning and the strategies that they used, and she compared these to the interactions of adult learners (taken from Long 1983). She found that, like adults, children do negotiate for meaning during interaction, using a wide range of strategies (e.g., clarification requests, confirmation checks, comprehension checks, and repetitions). However, she found proportional differences—lower for children than for adults—especially in the use of comprehension checks. She also found that fewer strategies were used when the dyads were more proficient (i.e., NNS–NNS > NNS–NS > NS–NS).

In 1996, Long introduced an updated version of the interaction hypothesis. The foundation of this hypothesis is that learners require not only positive evidence—data about what is possible in the target language (e.g., input), but also negative evidence—information about what is not possible or acceptable in the language being learned. This may take a variety of forms and may be provided preemptively, such as through teaching grammar rules, or reactively in the form of negative feedback (e.g., explicit correction, recasts, negotiation, metalinguistic comment, etc.). Given the importance of Long's work, it is not surprising that a considerable proportion of child SLA research is situated within the interactionist paradigm. Some of this research focused on the role of negative feedback—children receiving

and using feedback, and then developing their L2 as a consequence (e.g., Mackey, Kanganas, & Oliver, 2007; Mackey & Oliver, 2002; Mackey & Silver, 2005; Oliver, 1995, 1998, 2000, 2002, 2009; Oliver & Grote, 2010; Oliver & Mackey, 2003). For others, the goal was to determine which type of negative feedback was more useful (e.g., Bouffard & Sarkar, 2008; Choi & Li, 2012; Lyster, 2004; Lyster & Mori, 2006; Lyster & Ranta, 1997; Tedick & Young, 2016). Another line of research investigated age differences in interaction, including the provision and use of negative feedback (e.g., Azkarai & Imaz Agirre, 2016; García Mayo & Lázaro Ibarrola, 2015; Mackey & Philp, 1998; Mackey & Oliver, 2002; Mackey, Oliver, & Leeman, 2003; Pinter, 2006).

One example of this research is a quasi-experimental study by Mackey et al. (2003), which compared adults and children in classroom and pair work. As well as showing that differences exist according to age and context, this study provided empirical support for the use of pair work in classrooms by demonstrating that even child learners are able to provide the type of feedback that leads to improved language production. Similar studies, such as that by Pinter (2006), were undertaken in EFL laboratory settings. Like Mackey et al. (2003), Pinter (2006) found that children and adults differed in the strategies they used to complete the various tasks and suggested that the children's interactions were facilitative of L2 acquisition (i.e., containing opportunities for comprehensible input, output, and feedback).

In terms of the utility of negative feedback for children, one early experimental study was undertaken by Mackey and Oliver (2002). They explored the effects of negative feedback on ESL children's interlanguage development when working in adult–child dyads (representing the type of interaction that might occur between a teacher and student). Replicating the work of Mackey and Philp (1998), they used Pienemann's (1998) stages to measure the children's acquisition of question forms in a pretest, posttest, and delayed posttest design. Working with adult peers, 22 low-level proficiency ESL learners (8–12 years old) completed different communicative tasks over a period of 5 weeks. Half of the children (11) received implicit feedback on their production (e.g., recasts and negotiation), while the other 11 children (control group) did not—being given responses that merely continued the conversation. Their findings showed that negative feedback led to greater language development, and further, in children such development appeared to be more rapid than occurs in adults. When this study was replicated by Mackey and Silver (2005), but with a slightly younger cohort—ESL Chinese children (ages 6–9)—the same findings emerged.

Child SLA studies have included participants with a range of ages; however, the literature tends to treat child L2 learners in a monolithic way. Yet it has been shown that just as differences exist between adults and children, so do differences between younger and older child learners. Age differences for children have been found in interaction studies (e.g., in ESL settings: Oliver, 1998, 2002, 2009; in EFL settings: Azkarai & García Mayo, 2016; Azkarai & Imaz Agirre, 2016; Butler & Zeng, 2014, 2015; García Mayo & Lázaro Ibarrola, 2015), particularly in relation to task use (e.g., in ESL settings: Oliver, 1995, 1998, 2002; in EFL settings: Azkarai & Imaz Agirre, 2016) and task repetition (e.g., in ESL settings: Mackey

et al., 2007; in EFL settings: Azkarai & García Mayo, 2016; García Mayo & Imaz Agirre, 2016).

Differences have also been found in the L2 ultimate attainment of younger and older child L2 learners based on longitudinal studies (e.g., Jia & Fuse, 2007; Muñoz, 2014a; Ojima, Matsuba-Kurita, Nakamura, Hoshino, & Hagiwara, 2011; Snow & Hoefnagel-Höhle, 1978). For example, Jia and Aaronson (2003) conducted a study over 3 years in an ESL setting with six Chinese L1 children (ages 5–9) and four adolescents (ages 12–16). The researchers noted that the differences in ultimate attainment (younger achieving higher), may be accounted for by the language preferences of the two groups that emerged over time. While the younger children switched their preference to English in the first year, the older learners maintained a preference for Chinese even after 3 years. However, contrary results have been found in foreign language settings for children who began L2 learning at different ages (see García Mayo & García Lecumberri, 2003; Muñoz, 2006b). These studies have shown that after the same hours of instruction, those who started learning a language later showed advantages over those who started learning the foreign language at an earlier age (see Myles & Mitchell, 2012; Muñoz, 2006a, 2006b; Nikolov & Mihaljević Djigunović, 2006, 2011; Unsworth, de Bot, Persson, & Prins, 2012). The amount of input and opportunities to practice the target language in foreign language settings may also account for these differences (Muñoz, 2008, 2014a). Hence some scholars suggest that it is quality of the input, rather than the starting age, that has a more significant impact on L2 acquisition for young learners (Muñoz, 2014b). The nature of the different settings for child SLA is explored in greater detail in the following section.

DIFFERENT INSTRUCTIONAL SETTINGS AND TYPES OF LEARNERS

Language learning opportunities in different instructional settings are distinct, and thus it is difficult to generalize findings from one setting to another (Azkarai & Oliver, 2016; García Mayo & Lázaro Ibarrola, 2015). Of particular concern for child researchers is the difference between L2 and foreign language contexts. Unlike L2 learners who have access to the target language outside the classroom, learners in most foreign language settings only receive between 2 and 5 hours of instruction in the target language per week (García Mayo & García Lecumberri, 2003; Muñoz, 2006a). Although the Internet now offers a wide array of access to input (visual and aural) in the target language (Lewis, 2004), it is not clear to what extent foreign language learners are taking advantage of this resource, how beneficial it is for children in particular, and whether without opportunities to produce meaningful output it can compensate for a lack of "outside the classroom" target language environment.

Over the years a variety of strategies, approaches, and language programs (Edelenbos, Johnstone, & Kubanek, 2006) have been implemented to enhance L2 learning and especially to counteract the paucity of opportunities for foreign

language learners. These have included content-based instruction, theme-based language teaching (Brinton, 2003; Stoller, 2008), and CLIL (Coyle, 2007; Dalton-Puffer, 2011). The latter is an umbrella term that is now often adopted. Growing in popularity worldwide, CLIL began to emerge, especially in Europe, in the 1990s. Dalton-Puffer (2011, p. 183) described CLIL as "an educational approach where curricular content is taught through the medium of a foreign language, typically to students participating in some form of mainstream education at the primary, secondary, or tertiary level."

CLIL learners usually receive more hours of instruction in the target language than mainstream learners, and the input they receive is purported to be more meaningful, resulting in improved target language proficiency (Coyle, 2007). In addition, Nikolov (2016) claimed that CLIL programs allow learners to assess themselves, an opportunity that Muñoz (2007) stated is particularly important for children, when coupled with self-correction. Thus this methodology is seen as "an alternative that could overcome the deficiencies in previous language models" (Muñoz, 2007, p. 17).

As more schools implement CLIL, research in this setting has begun to emerge. For example, research has been undertaken by Azkarai and Imaz Agirre (2016) and by García Mayo and Lázaro Ibarrola (2015) with primary EFL school children of different ages in Spain (4th vs. 6th graders, and 3rd vs. 5th graders, respectively). They demonstrated that the type of interaction the learners engaged in varied according to instructional setting (CLIL vs. mainstream). However, whereas Azkarai and Imaz Agirre found that CLIL learners produced fewer negotiation strategies than mainstream learners, García Mayo and Lázaro Ibarrola (2015) found the opposite. They also found CLIL learners used their L1 to a lesser extent than mainstream learners. Azkarai and Imaz Agirre (2016) argued that the difference between their study and García Mayo and Lázaro Ibarrola's (2015) study could be because in their study they considered two tasks, whereas García Mayo and Lázaro Ibarrola considered only one.

Another type of pedagogy making a substantial contribution to child SLA research, perhaps beyond all others, is immersion (e.g., studies by Harley, 1998; Lightbown, Halter, White, & Horst 2002; Lightbown & Spada 1990; Lyster, 1998, 2001; Lyster & Ranta 1997; Tarone & Swain, 1995; White, Spada, Lightbown, & Ranta, 1991). Like CLIL, the objective of immersion programs is proficiency in the L2. However, while CLIL programs are relatively recent, immersion programs are well established (see Lasagabaster & Sierra, 2010). Unlike CLIL, in immersion settings, it is usually a local language that is taught, and the teachers are often bilingual, while in CLIL settings this is not always the case. In addition, the starting age in immersion settings is usually early than for CLIL.

A large amount of research in immersion settings has concerned the types of input and feedback that maximize opportunities for L2 development (e.g., Bouffard & Sarkar, 2008; Lyster, 2004; Lyster & Ranta, 1997). For instance, Tedick and Young (2016) examined the response to form-focused instruction on past-tense/aspects in Spanish (preterit and imperfect), in a two-way immersion setting involving students who had English as their home language and Spanish as a

minority language, and learners who had Spanish as their home language. The participants in this study were 5th graders (10–11 years old) and the data included pre-form-focused and post-form-focused instruction, as shown in the two excerpts below, in seven lessons. Their findings showed that these learners developed their metalinguistic awareness and produced more target-like language with post-form-focused instruction.

Example 1: Pre-form-focused instruction

1. Anna: *Aprendió que Frida pintó un muro muy grande y también que us:, use colores de como sentía*. [She (instead of I) learned that Frida painted a very large wall and also that she uses (used?) colors of how she felt.]
2. Julio: *Aprendí que ella pintaba las paredes y ella pinta que siente?* [I learned that she painted walls and she paints what she feels?]

(Tedick & Young, 2016, p. 798)

Example 2: Post-form-focused instruction

1. Theresa: *Microondas*. [Microwave.]
2. T: *¿Qué hizo? Necesito un verbo porque pregunté, '¿Qué hizo?' y me dijiste, 'Microondas.' Pero necesito un verbo. ¿Qué hizo el señor?* [What did he do? I need a verb because I asked you, 'What did he do?' and you answered, 'Microwave.' But I need a verb. What did the, the man do?]
3. Theresa: *El señor inventó-* [The man invented-].

(Tedick & Young, 2016, p. 796)

Even within immersion settings, different contexts have been considered. For example, Lyster and Mori (2006) analyzed the patterns of interactional feedback, uptake, and repairs in French and Japanese for immersion learners in 4th and 5th grades. They found that the French students produced more errors than the Japanese learners and that the majority of these errors were followed by feedback to a similar extent in the two settings. However, there was a greater level of uptake by the Japanese than the French learners. Recasts were the most common feedback type, especially in the Japanese immersion setting, and these led to uptake and repair more than prompts or explicit correction, while in the French immersion prompts were more advantageous.

Clearly, there is a need to consider the characteristics of the learners and the instructional context. While most of this research in L2 and foreign language settings has been informed by interactionism, this is not always the case. In the following section we outline child SLA research undertaken from a sociocultural perspective.

SOCIOCULTURAL PERSPECTIVE AND CHILD SLA RESEARCH

Early research of this type began with the work of Swain and colleagues (Swain, 1998; Swain & Lapkin, 1998) when they investigated the collaborative dialogue of 8th-grade French immersion students in Canada. This line of research was

expanded by Storch (2002), who examined the patterns of interaction, particularly the role of the interlocutors, in adult settings. Research with children has only recently begun to appear. Butler and Zeng (2014, 2015), for example, explored the patterns of interaction, interactional characteristics (such as turn-taking or topic development), and self-evaluations of Chinese EFL learners in 4th and 6th grades in task-based interaction. They found that 4th graders showed less engagement, and that their patterns of interaction were not stable across tasks. They also had more difficulties when completing the tasks, as shown by the larger number of questions they raised. In contrast, the 6th graders interacted with a high degree of mutuality (i.e., collaborative patterns), showed greater engagement with extended topic sequences, and used different functional types of utterances. Interestingly, they rated their proficiency in their L2 (English) lower than did the 4th graders.

Other SLA research undertaken within the sociocultural approach is that concerned with the role of L1 in L2 development. Beginning with the work of Antón and DiCamilla (1998) and Swain and Lapkin (2000), who investigated adults and adolescents, respectively, in recent times, this work has been extended to children. For example, Tognini and Oliver (2012) examined the use of L1 (i.e., English) of school children learning Italian and French in Australia. García Mayo and Lázaro Ibarrola (2015) also explored the use of L1 and found that CLIL learners in 3rd and 5th grades used less L1 than mainstream learners.

In a more comprehensive study, Azkarai and García Mayo (2016) explored the use and functions the L1 served in child EFL task repetition. Forty-two Spanish EFL learners (9–10 years old) participated in their study, which involved a spot-the-differences task. They found that the children used their L1 in less than 36% of their interactions and did so for a variety of purposes: clarification requests, confirmation checks, to indicate lack of knowledge—such as phatics, repetitions, metacognitive talk, and borrowings—and to appeal for help. Upon task repetition, the L1 use decreased and the functions the L1 served varied. This investigation also contributes to a growing body of research about task repetition. Other examples of such studies are provided below.

TASK REPETITION

Based on task repetition research undertaken with adults, Bygate (2001) claimed that this pedagogic strategy promotes learners' complexity, accuracy, and fluency. Repeating a task makes it more familiar and benefits L2 learners because "they have more processing space available for formulating the language needed to express their ideas" (Ellis, 2003, p. 246). It helps L2 learners to conceptualize what they want to say and choose the appropriate way to formulate it (Ellis, 2016).

Similar benefits of task repetition have also been reported for children working in different instructional settings. In ESL settings, Mackey et al. (2007) explored the effects of task familiarity with ESL 7- to 8-year-olds and found that learners who were not familiar with the content and procedure of the task generated more negotiation of meaning strategies and provided more corrective feedback; but when

learners were familiar with the task, the opportunities to use feedback were more frequent.

EFL research on task repetition with child learners is more extensive, and there are a range of findings. Pinter (2007) found that with repetition participants were able to complete the task more effectively and their fluency increased. Shintani (2012) found that learners' comprehension increased and task completion was achieved more easily upon repetition. The children also learned more targeted words, negotiated for meaning more often, seemingly gained more enjoyment (through play), and were more motivated. The use of L1 also decreased with repetition.

The relationship between task repetition and complexity, accuracy, and fluency for child EFL has been explored in other EFL studies. Sample and Michel (2014) found that the six 9-year-old learners ($M = 9.5$) in their study increased their fluency upon task repetition. However, they reported mixed findings for complexity and accuracy, although by the third repetition, the young learners appeared to pay more attention to the complexity, accuracy, and fluency in their production. Moreover their cooperation, motivation, confidence, and negotiation increased over time. With a larger cohort of Spanish EFL CLIL learners—54 participants ages 8–9 years and 66 participants ages 9–10 years—García Mayo, Imaz Agirre, and Azkarai (in press) found that procedural task repetition (i.e., same procedure, different content) improved learners' fluency and accuracy, whereas exact repetition (i.e., same procedure and content) resulted in a decrease of lexical richness and complexity.

It is evident that child SLA research is wide ranging, exploring different learners and contexts in a variety of ways. However, in this decade, criticism of such research has emerged because of the way it is conducted—specifically being done *on* children (Pinter et al., 2013) and not *with* children. Thus, involving children as active participants in research has emerged as a recent trend. This is described next.

CHILDREN AS RESEARCHERS

Recently, Pinter (2014) claimed it necessary for children to be part of research, they should have a more active role in it, and thus proposed that researchers should consider children as co-researchers (Pinter, 2014, p. 169). Pinter et al. (2013) claimed that in the majority of English language teaching research, children are seen as "objects" of interests by the researchers rather than "subjects" who might lead to new ways of working with children. Even for studies that focus on other languages (Muñoz, 2014b), there is a dearth of studies that consider children's perspectives. However, there have been some that do reflect the position of Pinter (2014) (e.g., Alderson, 2008; Alerby & Kostenius, 2011; Coppock, 2010; Kellett, 2010; Roberts, 2008; Woodhead & Faulkner, 2008).

Even so, there are different perceptions about whether this approach is feasible or even desirable. Some do not consider children cognitively competent to make decisions or, at the very least, to contribute to research or give opinions about

issues that could affect them (Holland, Renold, Ross, & Hillman, 2010; Kellett, 2010). Adding a further complication to this is the flexibility with which young children approach "truth" (Oliver, 2009), raising questions about whether or not they can be believed. In addition, it can be a long process to build the necessary rapport with children required to obtain "trustworthy" data (Pinter & Zandian, 2015), although other researchers have shown that children are able to be rational participants (Hyder, 2002; Lansdown, 2002). Nonetheless, there is considerable variation between children, resulting in some children participating with more enthusiasm than others (Pinter, 2014), drawing into question the generalizability of the research. Finally, the ethical issues surrounding children as participants are fraught, especially procedurally. For example, children are considered vulnerable by some research ethic councils (Pinter, 2014, p. 169). There is also the moral dilemma of children not having the same rights as adults, particularly in relation to issues of consent. Namely, it is adults who control and judge if children can be participants in research (Christensen & Prout, 2002; Skelton, 2008).

Despite this minefield of complexities, Pinter et al. (2013) claimed that children can be engaged as active researchers, helping to identify the gaps that exist between children's and adults' points of view with respect to good (language) teaching. They can provide a different perspective, and so "it is essential that children take a similarly active research role in SLA because they ask different questions, have different concerns, and see the world in different ways when compared with adults" (Pinter, 2014, p. 180). Therefore, children have the potential to provide very valuable insights for contexts such as bilingual and multilingual classrooms (Cameron, 2001; Pinter et al., 2013).

An example of a study that considered children's perspectives is an early, longitudinal study (over 8 years) by Nikolov (1999). She examined the attitudes and motivation of three groups of EFL Hungarian learners ages 6–14 years. Using a questionnaire, she assessed learners' changing attitudes toward their learning situation and their motivation for foreign language learning. She found that learners' showed a positive attitude toward their learning context, the activities, and the tasks. She also found that with age, motivation increased, but engagement and learning did not, suggesting that "children will choose to pay attention to, engage and persist in learning tasks only if they find them worth the trouble" (Nikolov, 1999, p. 53).

In a more recent study using an interview approach, Muñoz (2014b) examined primary school children's (ages 8–9 and 11–12) views about themselves as learners, the learning processes in which they engage when learning a foreign language, and the potentially favorable conditions for their learning. The findings indicated that children adjust their views and differentiate themselves from others as they grow older and gain experience as school learners. When Muñoz compared the answers of the two groups of learners, she found that self-regulation also developed with age. She found that initially, children learned English by collecting words, but by the end of primary school they also considered form-focused activities beneficial for language learning. Based on this, Muñoz concluded that children are capable of reflecting on their own development.

CONCLUSION

This review has outlined a number of studies exemplifying the various facets of child SLA research, particularly those that may have implications for the language classroom. One key factor is the contribution of age and the associated differences in cognitive and social development (Muñoz, 2014a; Philp et al., 2008). Together, these differences impact both the route and ultimate attainment of L2 learners, although the quality of the input and interactions may counterbalance the advantage of age, at least in foreign language settings. We have also shown differences exist not only between adults and children, but also among children of different ages.

The research we presented was carried out in a variety of ways, through longitudinal studies, case studies, experimental studies, and naturalistic studies, and undertaken in a range of instructional settings. It has been informed by a variety of theoretical positions, although we presented an argument showing that the interactional perspective (Long, 1983, 1996) has been strongly influential, and recent work has been underpinned by a sociocultural (Vygotsky, 1978) view.

Early SLA included child research, yet over time, much of it became based on constructs emerging from adult research. Of considerable concern is that findings emanating from adult studies have been applied to children and used to inform pedagogy without appropriate consideration of age differences. A more contemporary view is that child L2 learners are unique and engage in the language-learning process in ways that are distinct from their older counterparts. Further, in the past, younger learners were disenfranchised in the research process, but more recently, calls have been made for them to be included as active participants. There remains much more research to be done in the field of child SLA, especially research that engages children as co-researchers (Pinter, 2014).

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