Learner variables in the development of intercultural competence: A synthesis of home and study abroad research

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Abstract
To provide insights into a wide array of individual learner variables implicated in intercultural education in home and study abroad contexts, this study systematically reviewed the effects of such variables on the development of intercultural competence. The corpus consisted of 56 journal articles published over the past two decades (2000-2020). The purpose of this study was to explore: (a) learner variables that were described in research on intercultural competence, including, inter alia, their age, gender, first language (L1) background, proficiency level, and attitudinal orientations; (b) settings in which learners’ intercultural development was studied, including both home contexts and study abroad contexts; and (c) effects of learner variables on the development of their intercultural competence. The results of this synthesis
indicate that a growing number of studies have started to document intercultural instruction in both home and study abroad contexts. They show how learner variables were considered in conducting these studies and how variation in these variables impacted the effectiveness of instruction that targeted intercultural competence. The findings can considerably broaden our understanding of both opportunities and constraints in intercultural education in terms of learner variables and in particular variables that make the most contribution to intercultural development in home and study abroad contexts.

**Keywords**: learner variables; intercultural competence; home context; study abroad context

### 1. Introduction

With the rise of globalization, intercultural competence has been brought to the center of language education in the past two decades (Baker & Fang, 2021; Byram, 2008, 2019; Wagner & Byram, 2017). The intercultural competence of language learners can be developed either through instruction in classrooms in the home context or during exposure when participating in study abroad. While study abroad affords great opportunities for intercultural development (e.g., Bloom & Miranda, 2015; Czerwionka et al., 2015; Schartner, 2016), the majority of language learners studying at home receive classroom-based instruction with less opportunity for intercultural interaction unless there are initiatives for this opportunity in the curriculum (e.g., Álvarez Valencia & Fernández Benavides, 2019; Özdemir, 2017; Zhang, 2020). To expedite learners’ intercultural development, teachers build on a range of instruction methods, including explicit and implicit instruction, awareness-raising activities, email communication, online (a)synchronous intercultural exchanges, and intercultural social networks. However, the effectiveness of these methods largely bears on learner variables such as age, gender, and language proficiency. The purpose of this synthesis research was to explore learner variables that are implicated in the studies on the development of intercultural competence in home and study abroad contexts.

### 2. Intercultural language teaching

One of the critical aspects of language teaching that permeates second language acquisition (SLA) studies and has attracted the attention of numerous scholars is the concept of culture (Byram et al., 2013; Guilherme, 2000; Tolosa et al., 2018). During the past few decades, as an upshot of globalization, a number of scholars have introduced the concept of *intercultural communicative competence*
(ICC), which is beyond simple cultural knowledge and considers the dynamicity of cultures, intercultural interactions, and cultural identities (see Ho, 2009; Kubota, 1998; Wagner & Byram, 2017). The concept of ICC emerged and developed during the 1980s and 1990s, when a number of researchers attempted to demonstrate the underlying constructs of ICC by suggesting different models to present a clear definition of it (e.g., Abe & Wiseman, 1983; Byram, 1997; Gudykunst & Hammer, 1984; Howard-Hamilton et al., 1998; Koester & Olebe, 1988; Martin & Hammer, 1989). However, early studies in this area referred to ICC using different terminologies, including *multicultural competence*, *transcultural competence*, *cross-cultural adaptation*, *cross-cultural effectiveness*, *cross-cultural adjustment*, and *intercultural sensitivity*, which implied the same concept to some extent (see Biell & Doff, 2014; Deardorff, 2004; Kramsch, 2011).

The proposed concept of ICC promotes the notion of intercultural speaker as an ideal goal in language and culture teaching, as opposed to the entrenched ideology of native-speakerism (Byram & Wagner, 2018). Proponents of ICC have challenged the essentialist views that highlight cultural differences and focus on biases and stereotypes (see Holliday, 2011). According to the tenets of the ICC approach, learners should attain the capability to be moderators between various languages and cultures (Byram, 1997; Byram & Wagner, 2018; Kohler, 2020; Zarate et al., 2004). Therefore, while most approaches to teaching culture focus on the straightforward delivery of cultural information to second and foreign language (L2) learners, intercultural approaches emphasize the importance of the “meaning-making” process as well as intercultural identity formation that learners go through during active engagement with language and cultures (see Kohler, 2020; Kramsch & Nolden, 1994). Unlike mainstream communicative competence models that idealize the target society’s cultural values and encourage L2 learners to comply with native speaker norms (Alptekin, 1993, 2002), proponents of ICC take learners’ first language (L1) values into account as well. Moreover, learners are considered as both analyzers and participants throughout the interaction; they need to stay in conversation and resort to their linguistic and cultural repertoires in order to interpret their conversers’ messages and express their own (Liddicoat & Scarino, 2010). Inspired by the concept of intercultural communicative competence proposed by Byram (1997), intercultural L2 teaching and learning is the recent and leading paradigm of culture practice in SLA (Byram, 2019). Thus, in short, ICC refers to individuals’ ability to “see and manage relationships between themselves and their own cultural beliefs, behaviors and meanings, as expressed in a foreign language, and those of their interlocutors, expressed in the same language – or even a combination of languages” (Byram, 1997, p. 12).

To date, several models of intercultural language acquisition, teaching, learning, and assessment have been suggested by different scholars, which provide a
foundation for the currently practiced ICC teaching methods (e.g., Bennett et al., 1999; Byram, 2008; Deardorff, 2006; Risager, 2007; Ting-Toomey & Kurogi, 1998). Among the proposed models of intercultural competence, Byram and Zarate’s (1994) Savoirs model stands out. The model is fundamental to the current understanding of the concept of ICC in general and has informed subsequent intercultural teaching methods and related research. It is composed of four main phases, namely savoir, savoir être, savoir comprendre, savoir apprendre, and an additional phase called savoir s’engager, which was introduced later by Byram (cf. Byram, 1997; Byram & Zarate, 1994). These categories are related to the main aspects of ICC: attitudes, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness. Another model of intercultural pedagogy, put forward by Scarino and Liddicoat (2009), accounts for learners’ ICC development through a four-stage circular process of noticing, comparing, reflecting, and interacting. According to this model, first, learners notice some new L2 cultural norms. Subsequently, they discern similarities and differences between the new culture and their L1 culture by making comparisons. Consequently, thinking upon the two cultures leads to learners’ reflection as an essential component of ICC. Ultimately, through the last stage, drawing on their intercultural repertoire, individuals engage in the meaning-making process and learn to express themselves.

Since ICC cannot typically be achieved spontaneously and it necessitates constant engagement and feedback (McCloskey, 2012), a number of L2 teaching researchers have proposed more tangible, practical techniques which can guide teachers in implementing intercultural language teaching (e.g., Busse & Krause, 2015; East, 2012; Ennis & Riley, 2018; Kohler, 2020; Lázár, 2015; Reid, 2015; Rodríguez & Puyal, 2012; Tecedor & Vasseur, 2020). Such activities and teaching techniques can be implemented in different settings and take on different forms such as individual work, pair work, and whole-class activities (Corbett, 2003). Piątkowska (2015) categorized the different methods of enhancing learners’ ICC into three groups: formal instruction, which normally occurs in the classroom context; experiential learning tasks, which refer to learners’ experiences in immersion or study abroad programs; and the use of new technologies, which can be performed by practicing ICC through various technological instruments and platforms, including online forums, concordancers, telecollaboration, and video conferencing. Examples of studies akin to these categories are briefly described below.

East (2012) discussed the potential of task-based language teaching (TBLT) in developing L2 learners’ ICC as well as their linguistic competence. He believed that with the aid of appropriate teacher education, teachers can enhance their students’ ICC via TBLT and communicative competence-based language teaching methods. Also, inspired by Hughes’ (1986) work, Reid (2015) proposed a set
of teaching techniques that can be implemented in L2 classes with the aim of boosting learners' ICC, such as cultural assimilation, comparison method, drama, reformulation, noticing, role plays, cultural capsule, research, songs, games, portfolio, prediction, cultural island, field trip, and treasure hunt. In a similar vein, Zhang and Zhou (2019) identified overseas immersion as one of the most common approaches for boosting individuals’ ICC. Song (2020) studied the intercultural development of 33 American college students who wished to learn Korean during the course of six weeks in Korea. The analysis of participants’ data from an intercultural competence questionnaire, role play oral assessment, reflective writings, and interviews proved that they made significant improvement in the cognitive, affective, and behavioral aspects of ICC. Neff and Apple (2020) investigated the effects of two types of study abroad programs, long-term and short-term, on learners’ intercultural communication, L2 confidence, and sense of L2 self. After the analysis of pre- and post-study abroad survey data, the results indicated that the students who had spent more time abroad developed higher levels of ICC.

Several researchers have also highlighted the importance of computer or web-based approaches in fostering learners’ ICC (e.g., Furstenberg, 2010; Godwin-Jones, 2013, 2019; Lewis & O’Dowd, 2016; O’Dowd, 2012; Özdemir, 2017; Schenker, 2012). O’Dowd and Dooley (2020) looked into the types of online intercultural exchange between students. They believe that there are two main overarching models. The first model, which is more common, refers to class-to-class exchanges or telecollaboration, where two teachers work together to design tasks or projects, integrated into the class syllabus. Through the second model, called virtual exchange, students from different cultures contact one another via video-conferencing to engage in intercultural dialogue under the supervision of a teacher or trained facilitator. As an example of web-based approaches to ICC development, Van der Kroon et al. (2015) found in their analysis of 16 students’ task-based telecollaboration sessions for achieving intercultural understanding that such programs are highly effective as they provide numerous opportunities in this respect. In general, as argued by Piątkowska (2015), teaching practices which focus on experiential learning, whether by means of technological equipment or not, are likely to be more effective than methods that center on formal instructions.

To date, most of the studies targeting ICC have focused on developing ICC teaching frameworks and models but there are no unified methods and guidelines for their classroom implementation (Baker, 2015; Byram & Feng, 2004). This might be due to a lack of consensus upon the conception of ICC, inconsistent teaching methods for implementation, ineffective support from policy-makers, and practitioners’ insufficient knowledge of intercultural language teaching (see Gu, 2015; Kim & Ebesu Hubbard, 2007; Sercu, 2006; Young & Sachdev, 2011). However, a few researchers have embarked on conducting meta-analytic and systematic
reviews of ICC pedagogy and have have classified the current methodologies and attempts regarding this pedagogy. Bradford et al. (1998), in their meta-analysis of 16 studies, explored the association between studies on intercultural communication effectiveness and ICC, and attempted to find the relationship between knowledge-based and skill-based attributes in predicting ICC. Their analysis revealed the effects of these attributes and a strong association between ICC studies and intercultural communication effectiveness. In this analysis, measurement of ICC and intercultural communication effectiveness was demonstrated to be equivalent. Avgousti (2018) looked at the effectiveness of online intercultural exchanges in developing learners’ ICC by reviewing 54 studies exploring the impact of Web 2.0 tools published from 2004 to 2015 in this respect. Zhang and Zhou (2019) undertook a review of 31 previous studies on intercultural interventions and examined the relative effectiveness of such interventions. In their review, immersion and pedagogical intervention were identified as the two major types of instruction. They categorized the conducted interventions as culture-based teaching materials, classroom activities, teaching strategies, and integrated intercultural programs. It was found that overseas immersion contributes to ICC development to a greater extent than pedagogical intervention does. Finally, Bagwe and Haskollar (2020) conducted a systematic review of variables impacting intercultural competence. They found that the impact of the intercultural training program was significant across the board; however, it was hard to predict the impact of demographic factors such as age, gender, education, linguistic ability, geography, religion, and ethnicity/race.

3. Learner variables

Learner variables have long been neglected in the history of L2 acquisition because the main focus of L2 practitioners and teaching methods was on teachers, while learners were assumed to be passive recipients of the instruction. It was not until the 1970s that learners’ roles and individual learner variables were increasingly recognized as decisive factors in L2 pedagogy. Consequently, L2 researchers began investigating the relative contribution of these variables to learners’ L2 achievement. The conducted studies have discussed the effects of various learner variables on general L2 achievement of learners, such as their attitudes and motivation (e.g., Csizér, 2017; Moskovsky et al., 2016), beliefs about language learning (Alhamami, 2018; Aragão, 2011), age (e.g., Artieda et al., 2020; Marinova-Todd et al., 2000), and gender (e.g., Bečirović, 2017; Mori & Gobel, 2006; Norton & Pavlenko, 2004). Meanwhile, several studies have focused on the effect of each of these variables on specific aspects of L2, such as, for example, different skills and subskills (e.g., Amiryousefi, 2018; Ke & Chan, 2017; Lee & Pulido, 2017;
Ruiz-Funes, 2015; Vandergrift & Baker, 2015) and specific teaching methods or approaches (e.g., Namaziandost & Çakmak, 2020; Baker-Smemoe et al., 2014). Some others also have sought to shed light on the relationship between different learner variables or their confounding effects on some components of L2 (e.g., Calafato & Tang, 2019; Kormos & Csizér, 2008; Yashima et al., 2017). However, so far, the findings have not been conclusive, as they have not reached the same results. For example, Marinova-Todd et al. (2000), in their analysis of previous investigations on the effect of age, illustrated how different studies on L2 learners’ age supported or refuted the critical period hypothesis, and discussed the interplay between individuals’ age and a variety of social, psychological as well as educational factors that can affect L2 proficiency.

As for ICC, which is contended to be part of 21st-century individuals’ language competence, several learner variables are assumed to be critical (e.g., see Council of Europe, 2008; National Standards in Foreign Language Education Project, 2006). For example, Wagner et al. (2017) edited a volume on how this competence can be practiced across different age groups. Since ICC is inextricably intertwined with different cultures and individuals’ cultural experiences, other learner-related factors (e.g., learners’ social background, race, L1, overseas experience, prior knowledge, motivation, and attitudes) in conjunction with common learner variables (e.g., age, gender, and proficiency level) can play substantial roles in ICC development. In fact, the reciprocal relationships between learners’ motivation, intercultural awareness and attitudes were highlighted by Byram (2008). Hismanoglu (2011) reported on the importance of learners’ previous cultural and overseas experience in developing their ICC, which was echoed in other studies as well (e.g., Medina-López-Portillo, 2004; Root & Ngampornchai, 2013). Mirzaei and Forouzandeh (2013) found a significant relationship between individuals’ L2 learning motivation and ICC. Oz (2015) found a significant positive relationship between the ideal L2 self and ICC of Turkish EFL learners. Moreover, Ghasemi et al. (2020) proposed an ICC model that incorporates a relationship between learners’ international posture, ideal L2 self, L2 self-confidence, and metacognitive strategies, and suggested these factors as contributing to individuals’ intercultural competence. They highlighted that individuals who would like to engage in international affairs and take on international vocations are more likely to interact with people of other cultures and consequently possess a higher level of ICC.

Despite this body of research and in conjunction with other studies on learner variables, the results of research on the role of these variables in ICC are rather contradictory. For example, regarding learners’ gender, some of them prioritized females (e.g., Berg, 2009; Clark & Trafford, 1995; Sung & Padilla, 1998), a number of them provided evidence for male learners’ better performance (e.g., Kim & Goldstein, 2005; Medina-López-Portillo, 2004; Pan, 2007), and still others reported no relationship whatsoever between these two variables (Mirzaei
Moreover, the relationship between learners’ age and their ICC remained rather unnoticed. Whereas some studies reported age as a decisive factor in learners’ ICC (e.g., Medina-López-Portillo, 2004), others did not report any significant effects in this respect (e.g., Busse & Krause, 2016). These controversies suggest the need for a systematic review in order to explore the possible effects of learner variables on ICC in different contexts. To bridge this gap, this synthesis research aimed to offer an in-depth review of the related studies and to highlight the existing gaps in the literature or areas which need further empirical investigation. Thus, the following research questions were addressed in this study:

1. What types of intervention (i.e., instruction or no instruction) are described in studies on L2 learners’ ICC development? What are the contexts of these studies (study abroad or home contexts)?
2. What learner variables are described in studies on L2 learners’ ICC development?
3. What learner variables are examined for their effects in studies on L2 learners’ ICC development?

4. Method

4.1. Literature search and inclusion criteria

The aim of the present study was to synthesize current studies on ICC development in relation to learner variables. The target studies either included instruction at home and study abroad, as the main interventions for developing learners’ ICC (see Zhang & Zhou, 2019), or sought to measure the association between learner variables and ICC level/development in non-instructional contexts. The systematic literature search employed in the present study included two main strategies to identify the relevant literature concerning learner variables in the development of ICC: conducting a search in Google Scholar and using several reliable academic databases. In order to locate the relevant studies, multiple sources and databases were explored, as suggested by Brunton et al. (2012), Gough et al. (2013), and Lipsey and Wilson (2001). The process of probing studies in Google Scholar, which is a well-known platform for finding research papers, began by searching the first 300 studies which emerged on the first 30 pages of the search engine. The studies were published between the years 2000-2020. The following terms and phrases were used to locate the relevant studies: intercultural communicative competence, intercultural language
teaching, intercultural competence teaching, intercultural instruction, intercultural communicative competence and learner variables, intercultural instruction, intercultural competence and second language, intercultural competence and L2, L2 learners’ intercultural competence, and intercultural competence and study abroad. However, only the papers which were published by some of the leading international publishers in the field of applied linguistics, such as Taylor and Francis, Elsevier, Sage, Springer, Wiley, Oxford University Press, Cambridge University Press, De Gruyter, JSTOR, and Frontiers, were selected. Those papers were also limited to research studies; accordingly, book chapters, review papers, meta-analyses, conference papers, short papers (less than 6000 words), reports, and dissertations were not included. Next, the same terms were directly searched in the Language and Linguistics section of several database websites, such as Science Direct, Taylor and Francis, and Sage, in case the relevant studies were left out in Google Scholar search. A total of 115 papers were examined and the studies that focused on teachers’ ICC rather than L2 learners’ were excluded. Moreover, only the papers that were published in applied linguistics and L2 studies journals and focused on participants who were language learners or L2 speakers were targeted; that is, the studies that sought to analyze the ICC level of individuals who were not L2 learners or L2 was not part of their learning programs were eliminated. This iterative process of literature search, which lasted from June 2020 to September 2020, led to the selection of 56 papers for final analysis.

4.2. Data analysis

The purpose of the present systematic review was to provide a clear picture of the studies conducted on ICC instruction, the context of ICC development, learner variables described in these studies, and the effects of learner variables on their ICC levels. To this end, several factors or themes concerning the methodology and results of the studies were subject to analysis. These factors included the context of the studies, the employed treatment or instruction, the number of participants and their L1 and L2, the analyzed learner variables (e.g., gender, age, and language proficiency), and, more importantly, the effects of these variables on individuals’ ICC. Subsequently, each of these themes was further divided into several subthemes and coded based on previous related studies and systematic reviews. The analyzed variables and the coding scheme are presented below:

- Context of the study: This variable was sub-coded into home study and study abroad contexts. A home study referred to research that investigated individuals’ ICC or ICC development in their home country, whereas a study abroad focused on individuals whose ICC or ICC development was analyzed when they resided in the L2 context.
Instruction: The reviewed research was either instructional or non-instructional. The former concerned studies that included ICC interventions, and the latter referred to studies that did not aim at improving participants’ ICC.

Participants’ gender: Participants’ gender was coded as male, female, both, and not mentioned.

Participants’ age: Individuals' age was coded into four groups: not mentioned, below 18, 18 and above, and both.

Micro-context: This variable dealt with the educational context where the data were collected. It was coded into not mentioned, universities and colleges, schools, language institutes, and different contexts.

L1 background: The participants’ first language was coded. The assigned codes were chosen based on the frequency of the languages. This category included English, Chinese, German, others, different languages, and not reported.

L2 background: This theme referred to the codes which focused on the participants’ target language. In general, participants' L2s were divided into eight codes: English, Spanish, Arabic, Chinese, Italian, German, not reported, and different languages.

Language proficiency: The reviewed studies included participants at different levels of language proficiency. In this systematic review, this was coded into elementary, intermediate, advanced, mixed (the studies in which participants were at different proficiency levels), and not mentioned.

The effects of learner variables: Of the 56 studies, 15 considered the effects of learner variables on ICC or ICC development. These learner variables included language proficiency; age; gender; previous contact with L2 culture; attitudinal, affective, or behavioral factors; ethnicity, race, or nationality; and other variables such as parents' educational background or learners' location. In addition, these codes were further divided into the two categories of effective and not effective based on their effectiveness.

It should be noted that only the information which was explicitly stated in the reviewed research was included in our analysis. The frequency of each code and sub-code was calculated and illustrated in tables using the SPSS software program. Furthermore, in order to analyze the intersections between some variables, such as, for instance, participants’ age and gender, the crosstabs of the variables were calculated.

5. Results

In this part, we present the analysis of our three themes: (a) context and instruction, (b) learner variables, and (c) effects of learner variables across contexts.
For each theme, we first present the frequency of studies related to the subthemes constituting each theme and then, whenever necessary, some examples of studies are cited from our corpus.

5.1. Theme 1: Context and instruction

The first theme we investigated was the context of the studies (i.e., whether a study was conducted in a study abroad or home context) and the type of instruction. The number of studies across contexts and instruction types is presented in Table 1 and Table 2.

<table>
<thead>
<tr>
<th>Context</th>
<th>Type of instruction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Instruction</td>
<td>No instruction</td>
</tr>
<tr>
<td>Home</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Study abroad</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 1 Number of studies across contexts and instruction types

Table 2 Types of instruction and contexts of the studies

<table>
<thead>
<tr>
<th>Subthemes</th>
<th>Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study abroad</td>
<td>Alred &amp; Byram (2002); Berg (2009); Bloom &amp; Miranda (2015); Cubillos &amp; Ilvento (2018); Czerwionka et al. (2015); Elola &amp; Oskoz (2008); Engle &amp; Engle (2004); Heinzmann et al. (2015); Hismanoglu (2011); Holmes (2006); Holmes et al. (2016); Houghton (2014); Jackson (2011, 2017); Lee (2011, 2012); Lenkaitis et al. (2019); Martinsen (2011); Medina-López-Portillo (2004); Palmer (2013); Root &amp; Ngampornchai (2013); Sample (2013); Scally (2015); Schartner (2016); Shiri (2015); Watson &amp; Wolfel (2015)</td>
</tr>
<tr>
<td>Home study</td>
<td>Acheson et al. (2015); Álvarez Valencía &amp; Fernández Benavides (2019); Busse &amp; Krause (2015, 2016); Chen &amp; Yang (2016); Escudero (2013); Helm (2009); Ishii (2009); Kusumaningputri &amp; Widodo (2018); Lee &amp; Markey (2014); Liaw (2006); Mirzaei &amp; Forouzandeh (2013); O’Dowd (2000, 2003); Özdemir (2017); Peng &amp; Wu (2016); Rodríguez &amp; Puyal (2012); Rothwell (2011); Schenker (2012); Su (2011a, 2011b); Tiranaz &amp; Haddad Narafshan (2020); Tran &amp; Duong (2018); Truong &amp; Tran (2014); Tudini (2007); Wang &amp; Kulich (2015); Wang et al. (2013); Yıldız (2009); Yu &amp; Van Maele (2018); Zhang (2020)</td>
</tr>
<tr>
<td>Instruction</td>
<td>Acheson et al. (2015); Álvarez Valencía &amp; Fernández Benavides (2019); Busse &amp; Krause (2015, 2016); Chen &amp; Yang (2016); Elola &amp; Oskoz (2008); Escudero (2013); Helm (2009); Hismanoglu (2011); Holmes et al. (2016); Houghton (2014); Ishii (2009); Kusumaningputri &amp; Widodo (2018); Lee (2011, 2012); Lee &amp; Markey (2014); Lenkaitis et al. (2019); Lee (2011); Liaw (2006); O’Dowd (2000, 2003); Özdemir (2017); Rodríguez &amp; Puyal (2012); Rothwell (2011); Sample (2013); Schenker (2012); Su (2011a, 2011b); Tiranaz &amp; Haddad Narafshan (2020); Tran &amp; Duong (2018); Truong &amp; Tran (2014); Wang &amp; Kulich (2015); Wang et al. (2013); Yıldız (2009); Yu &amp; Van Maele (2018); Zhang (2020)</td>
</tr>
<tr>
<td>No instruction</td>
<td>Alred &amp; Byram (2002); Berg (2009); Bloom &amp; Miranda (2015); Cubillos &amp; Ilvento (2018); Czerwionka et al. (2015); Engle &amp; Engle (2004); Heinzmann et al. (2015); Holmes (2006); Jackson (2011, 2017); Martinsen (2011); Medina-López-Portillo (2004); Mirzaei &amp; Forouzandeh (2013); Palmer (2013); Peng &amp; Wu (2016); Root &amp; Ngampornchai (2013); Scally (2015); Schartner (2016); Shiri (2015); Tudini (2007); Watson &amp; Wolfel (2015)</td>
</tr>
</tbody>
</table>

First, it was revealed that almost half of the studies (N = 26) were conducted in a study abroad context (e.g., Alred & Byram, 2002; Cubillos & Ilvento,
2018; Lee, 2012) and the other 30 studies were undertaken in the home context (e.g., O’Dowd, 2003; Truong & Tran, 2014; Yu & Van Maele, 2018), suggesting a balanced distribution. As regards teaching methods (see Table 1 and Table 2), it was found that ICC instruction through classroom-based methods (instruction category) was the most prominent method in our corpus \((N = 35)\) (e.g., Elola & Oskoz, 2008; Hismanoglu, 2011; Zhang, 2020) and it was the most prominent category in the home context \((N = 27)\) rather than in the study abroad \((N = 8)\). However, some other studies \((N = 21)\) utilized no teacher instruction and hence they were non-instructional (e.g., Jackson, 2017; Shiri, 2015), with the majority of these studies being implemented in the study abroad context \((N = 18)\). To conclude, ICC development through classroom-based instruction was the most frequent method in the home context and no instruction studies were the most recurrent ones in the study abroad context.

5.2. Theme 2: Learner variables

As listed before, we targeted a wide range of learner variables in our corpus of studies, including gender, age, L1, L2, and language proficiency, and not all of them were investigated with regard to their effects. Table 3 shows different breakdowns of gender and age. Table 4 presents the studies related to the learner variables of age and gender. As can be seen in Table 4, most of the studies used 18 and above (the most prominent age category in the sample) participants, who were mostly comprised of both male and female learners \((N = 39)\).

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NM</td>
<td>Female</td>
</tr>
<tr>
<td>Not mentioned (NM)</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Below 18</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>18 and above</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Both</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>1</td>
</tr>
</tbody>
</table>

First, regarding gender, the results illustrated that most studies \((N = 39)\) included both males and females as their participants (e.g., Busse & Krause, 2016; Jackson, 2017; Zhang, 2020). However, several studies \((N = 16)\) did not provide information about the participants’ gender (e.g., Acheson et al., 2015; Álvarez Valencia & Fernández Benavides, 2019; Chen & Yang, 2016), and no study considered only male participants in its sampling. Moreover, one study used only females as participants (Lenkaitis et al., 2019). Second, the results of age analysis, as another targeted learner variable, revealed that most studies
(e.g., Álvarez Valencia & Fernández Benavides, 2019; Berg, 2009; Bloom & Miranda, 2015) tended to include adults in their investigation (N = 41), which was followed by studies (N = 9) with both adults and non-adults as their targeted participants (e.g., Heinzmann et al., 2015; Ishii 2009; Özdemir, 2017). As shown in Table 3, the studies rarely included non-adults (N = 3) as their only participants (e.g., Acheson et al., 2015; Chen & Yang, 2016) or did not specify the participants’ age (e.g., Elola & Oskoz, 2008; Truong & Tran, 2014).

Table 4 Studies reporting on the learner variables of gender and age

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male (N = 0)</th>
<th>Female (N = 1)</th>
<th>Both (N = 39)</th>
<th>Not mentioned (N = 16)</th>
<th>Age Not reported (N = 3)</th>
<th>Below 18 (N = 3)</th>
<th>18 and above (N = 41)</th>
<th>Both (N = 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lenkaitis et al. (2019)</td>
<td>Alred &amp; Byram (2002); Berg (2009); Bloom &amp; Miranda (2015); Busse &amp; Krause (2015, 2016); Cubillos &amp; Ilvento (2018); Czerwionka et al. (2015); Engle &amp; Engle (2004); Heinzmann et al. (2015); Hismanoglu (2011); Holmes (2006); Holmes et al. (2016); Houghton (2014); Ishii (2009); Jackson (2011, 2017); Kulich (2015); Kusumaningputri &amp; Widodo (2018); Liaw (2006); Medina-López-Portillo (2004); Mirzaei &amp; Forouzandeh (2013); O’Dowd (2000); Özdemir (2017); Palmer (2013); Peng &amp; Wu (2016); Rothwell (2011); Scally (2015); Schartner (2016); Shenker (2012); Shiri (2015); Su (2011a, 2011b); Tran &amp; Duong (2018); Trindale (2007); Wang et al. (2013); Watson &amp; Wolfel (2015); Yildiz (2009); Yu &amp; Van Maele (2018); Zhang (2020)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acheson et al. (2015); Álvarez Valencia &amp; Fernández Benavides (2019); Chen &amp; Yang (2016); Elola &amp; Oskoz (2008); Escudero (2013); Helm (2009); Lee (2011, 2012); Lee &amp; Markey (2014); Martinsen (2011); O’Dowd (2003); Rodriguez &amp; Puyal (2012); Root &amp; Ngampornchai (2013); Sample (2013); Tirnaz &amp; Narafshan (2020); Truong &amp; Tran (2014)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elola &amp; Oskoz (2008); O’Dowd (2003); Truong &amp; Tran (2014)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acheson et al. (2015); Chen &amp; Yang (2016); Rothwell (2011)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alred &amp; Byram (2002); Álvarez Valencia &amp; Fernández Benavides (2019); Berg (2009); Bloom &amp; Miranda (2015); Busse &amp; Krause (2015); Cubillos &amp; Ilvento (2018); Czerwionka et al. (2015); Engle &amp; Engle (2004); Escudero (2013); Helm (2009); Hismanoglu (2011); Holmes (2006); Holmes et al. (2016); Houghton (2014); Jackson (2011, 2017); Kusumaningputri &amp; Widodo (2018); Lee (2011, 2012); Lee &amp; Markey (2014); Lenkaitis et al. (2019); Martinsen (2011); Medina-López-Portillo (2004); Mirzaei &amp; Forouzandeh (2013); O’Dowd (2000); Palmer (2013); Root &amp; Ngampornchai (2013); Scally (2015); Rodriguez &amp; Puyal (2012); Sample (2013); Tirnaz &amp; Narafshan (2020); Truong &amp; Tran (2014)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peng &amp; Wu (2016); Schartner (2016); Tirnaz &amp; Narafshan (2020); Tran &amp; Duong (2018)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 4, the great majority of the research articles reviewed focused on adult language learners (above 18 years old) in their research. To illuminate the participants’ background, Table 5 depicts the micro-contexts of the studies, that is, whether the data were collected in university, school, language institutes, or other contexts.
Table 5 Micro-contexts of the reviewed studies

<table>
<thead>
<tr>
<th>Micro-context</th>
<th>Palmer 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not mentioned</td>
<td>Alred &amp; Byram (2002); Álvarez Valencia &amp; Fernández Benavides (2019); Berg (2009); Bloom &amp; Miranda (2015); Cubillos &amp; Ilvento (2018); Czerwionka et al. (2015); Elola &amp; Oskoz (2008); Engle &amp; Engle (2004); Escudero (2013); Helm (2009); Hismanoglu (2011); Holmes (2006); Holmes et al. (2016); Houghton (2014); Jackson (2011, 2017); Kulich (2015); Kusumaningpratiri &amp; Widodo (2018); Lee (2011, 2012); Lee &amp; Markey (2014); Lenkaitis et al. (2019); Liaw (2006); Martinsen (2011); Medina–López–Portillo (2004); Mirzaei &amp; Forouzandeh (2013); O'Dowd (2000, 2003); Özdemir (2017); Peng &amp; Wu (2016); Rodríguez &amp; Puyal (2012); Root &amp; Ngampornchai (2013); Sample (2013); Scally (2015); Schartner (2016); Shiri (2015); Su (2011a, 2011b); Wang et al. (2013); Watson &amp; Wolfel (2015); Yildiz (2009); Yu &amp; Van Maele (2018); Zhang (2020)</td>
</tr>
<tr>
<td>University and college</td>
<td>Acheson et al. (2015); Chen &amp; Yang (2016); Heinzmann et al. (2015); Ishii (2009); Rothwell (2011)</td>
</tr>
<tr>
<td>School</td>
<td>Tirnaz &amp; Narafshan (2018); Tran &amp; Duong (2018); Truong &amp; Tran (2014)</td>
</tr>
<tr>
<td>Language institute</td>
<td>Busse &amp; Krause (2015, 2016); Schenker (2012); Tudini (2007)</td>
</tr>
</tbody>
</table>

Evidently, 43 studies chose universities and colleges as the main contexts of their data (e.g., Alred & Byram, 2002; Álvarez Valencia & Fernández Benavides, 2019), while few of them targeted individuals learning a second language at schools (e.g., Heinzmann et al., 2015; Ishii, 2009; Rothwell, 2011) and language institutes (e.g., Tirnaz & Narafshan, 2018; Tran & Duong, 2018). Consequently, the participants of ICC studies were mainly adults. To present a clearer picture of different age groups’ participations from various micro-contexts in the reviewed studies, Table 6 illustrates different breakdowns of age and micro-context.

Table 6 Intersections of age and micro-context

<table>
<thead>
<tr>
<th>Micro-context</th>
<th>Age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not mentioned</td>
<td>Below 18</td>
</tr>
<tr>
<td>Not mentioned</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Universities and college</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Schools</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Language institutes</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Different contexts</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to gender, age, and micro-context (e.g., schools and universities), the studies we analyzed reported on the learner variables of L1 background, L2 background, and language proficiency. Table 7 outlines the list of the studies representing each of these three variables.

As to the L1 and L2 of participants, Table 7 shows that a great number of studies did not specify their L1 background (N = 27) (e.g., Rodríguez & Puyal, 2012; Su, 2011a, 2011b). Among those studies that included participants’ L1,
English \((N = 9)\) (e.g., Acheson et al., 2005; Lenkaitis et al., 2019) was the most recurrent finding, and a mixture of learners with different L1s \((N = 8)\) (e.g., Schartner, 2016; Zhang, 2020) was the next. As regards the L2 background of learners in our corpus of studies, English was the most frequently studied L2 \((N = 25)\) (e.g., Hismanoglu, 2011; Tiranaz & Narafshan, 2020; Tran & Duong, 2018) and Spanish ranked second in our corpus \((N = 13)\) (e.g., Elola & Oskoz, 2012; Lee, 2012; Lenkaitis et al., 2019).

**Table 7** Studies reporting on the learner variables of L1 background, L2 background, and language proficiency

<table>
<thead>
<tr>
<th>L1 background</th>
<th>Not reported ((N = 27))</th>
<th>Álvarez Valencia &amp; Fernández Benavides (2019); Berg (2009); Bloom &amp; Miranda (2015); Elola &amp; Osoko (2008); Engle &amp; Engle (2004); Escudero (2013); Helm (2009); Kusumaningputri &amp; Widodo (2018); Lee (2012); Liaw (2006); Medina-López-Portillo (2004); Mirzaei &amp; Forouzandeh (2013); Özdemir (2017); Palmer (2013); Peng &amp; Wu (2016); Rodríguez &amp; Puyal (2012); Root &amp; Ngampornchai (2013); Sample (2013); Scally (2015); Schenker (2012); Shiri (2015); Su (2011a, 2011b); Tran &amp; Duong (2018); Truong &amp; Tran (2014); Watson &amp; Wolfel (2015); Yildiz (2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English ((N = 9))</td>
<td>Acheson et al. (2015); Alred &amp; Byram (2002); Cubillos &amp; Ilvento (2018); Czerwionka et al. (2015); Lenkaitis et al. (2019); Martinsen (2011); Rothwell (2011); Tudini (2007); Wang et al. (2013)</td>
<td></td>
</tr>
<tr>
<td>Chinese ((N = 6))</td>
<td>Chen &amp; Yang (2016); Holmes (2006); Jackson (2011, 2017); Wang &amp; Kulich (2015); Yu &amp; Van Maele (2018)</td>
<td></td>
</tr>
<tr>
<td>German ((N = 2))</td>
<td>Busse &amp; Krause (2015, 2016)</td>
<td></td>
</tr>
<tr>
<td>Different languages ((N = 8))</td>
<td>Heinzmann et al. (2015); Holmes et al. (2016); Houghton (2014); Lee (2011); Lee &amp; Markey (2014); O’Dowd (2000); Schartner (2016); Zhang (2020)</td>
<td></td>
</tr>
<tr>
<td>Other languages ((N = 4))</td>
<td>Hismanoglu (2011); Ishii (2009); O’Dowd (2003); Tiranaz &amp; Narafshan (2020)</td>
<td></td>
</tr>
<tr>
<td>L2 background</td>
<td>Not reported ((N = 4))</td>
<td>Jackson (2017); Root &amp; Ngampornchai (2013); Sample (2013); Schartner (2016)</td>
</tr>
<tr>
<td>English ((N = 25))</td>
<td>Busse &amp; Krause (2015, 2016); Álvarez Valencia &amp; Fernández Benavides (2019); Chen &amp; Yang (2016); Engle &amp; Engle (2004); Escudero (2013); Hismanoglu (2006); Houghton (2014); Ishii (2009); Jackson (2011); Kusumaningputri &amp; Widodo (2018); Liaw (2006); Mirzaei &amp; Forouzandeh (2013); Özdemir (2017); Peng &amp; Wu (2016); Rodríguez &amp; Puyal (2012); Su (2011a, 2011b); Tiranaz &amp; Narafshan (2020); Tran &amp; Duong (2018); Truong &amp; Tran (2014); Wang &amp; Kulich (2015); Yildiz (2009); Yu &amp; Van Maele (2018)</td>
<td></td>
</tr>
<tr>
<td>Spanish ((N = 13))</td>
<td>Acheson et al. (2015); Alred &amp; Byram (2002); Bloom &amp; Miranda (2015); Cubillos &amp; Ilvento (2018); Czerwionka et al. (2015); Elola &amp; Oskoz (2008); Helm (2009); Lee (2011, 2012); Lenkaitis et al. (2019); Martinsen (2011); Medina-López-Portillo (2004); Scally (2015)</td>
<td></td>
</tr>
<tr>
<td>Arabic ((N = 2))</td>
<td>Palmer (2013); Shiri (2015)</td>
<td></td>
</tr>
<tr>
<td>Chinese ((N = 1))</td>
<td>Zhang (2020)</td>
<td></td>
</tr>
<tr>
<td>Different languages ((N = 8))</td>
<td>Berg (2009); Heinzmann et al. (2015); Lee &amp; Markey (2014); O’Dowd (2000, 2003); Schenker (2012); Wang et al. (2013); Watson &amp; Wolfel (2015)</td>
<td></td>
</tr>
</tbody>
</table>
Finally, relating to the proficiency levels of participants, similar to L1 background, less than half of the studies did not provide any demographic information about this learner variable (N = 21) (e.g., Busse & Krause, 2016; Scally, 2015; Schartner, 2016). It should be noted that most studies used students with different proficiency levels or mixed levels (N = 14) (e.g., Yildiz, 2009; Yu & Van Maele, 2018; Zhang, 2020), followed by intermediate levels (N = 11) (e.g., Heinzmann et al., 2015; Kusumaningputri & Widodo, 2018; Lenkaitis et al., 2019), advanced levels (N = 7) (e.g., Escudero, 2013; Jackson, 2017; Özdemir, 2017), and beginner levels (N = 3) (e.g., Acheson et al., 2015; Tran & Duong, 2018).

5.3. Theme 3: Effects of learner variables across contexts

The last theme we analyzed was the effect of learner variables on their ICC. Out of 56, 15 studies reported on the effect of one of the variables of language proficiency, age, previous contact or knowledge, gender, attitudinal, affective, or behavioral factors, ethnicity, race, or nationality, and other variables (parents’ educational background and learners’ location) (e.g., Palmer, 2013; Peng & Wu, 2016; Scally, 2015). Table 8 outlines these studies.

It should be noted that as the selected studies were of different research designs (i.e., quantitative, qualitative, and mixed methods), the employed research methods and number of participants varied as well (from N = 10 to N = 1297). For example, O'Dowd (2003) and Bloom and Miranda (2015) employed 10 and 15 participants in their studies, respectively, while Heinzman et al. (2015) examined 540
or Berg (2009) explored 1297 cases in their research. Moreover, the researchers assessed the ICC development of language learners in their studies using different assessment tools and techniques. The majority of the studies used questionnaires or tests which were mainly based on learners’ self-report and evaluations (e.g., Berg, 2009; Bloom & Miranda, 2015; Heinzmann et al., 2015; Ishii, 2009; Martinsen, 2011; Mirzaei & Forouzandeh, 2013; Palmer, 2013; Peng & Wu, 2016; Scally, 2015). However, some of them employed tasks or critical incidents which required the participants to write down their answers (e.g., Busse & Krause, 2016; Hismanoglu, 2011; O’Dowd, 2003). Meanwhile, others used texts such as analysis of individuals’ utterances and chats (Tudini, 2007) or employed multiple assessment tools to enhance the depth of their analysis (Cubillos & Ilvento, 2018; Medina-López-Portillo, 2004).

### Table 8: Studies on the effects of learner variables

<table>
<thead>
<tr>
<th>Studies analyzing the effects of learner variables (N = 15)</th>
<th>Language proficiency</th>
<th>Age</th>
<th>Gender</th>
<th>Attitudinal, affective, or behavioral factors</th>
<th>Ethnicity, race, or nationality</th>
<th>Previous contact</th>
</tr>
</thead>
</table>
In what follows, we provide more details on the effects of these variables within the studies conducted in study abroad and home contexts. Moreover, we comment on exemplary studies from our corpus related to each learner variable in a specific context. Table 9 presents the number of studies in which learner variables were found to be either effective or non-effective across two different contexts, that is, study abroad and home. It should be noted that we reported on the effects in terms of their statistical significance in purely quantitative studies and quantitative parts of mixed-methods studies (e.g., Busse & Krause, 2016; Palmer, 2013; Peng & Wu, 2016); however, in a few of our sample studies the term effective was used by researchers without reporting on any statistical significance (i.e., qualitative or mixed-methods studies), which is why while referring to these studies, we just described the results as effective (O’Dowd, 2003). Table 9 also depicts the number of studies that targeted each learner variable. First, relating to language proficiency, it was found that this variable was examined in six studies (e.g., Hismanoglu, 2011; Ishii, 2009). However, a statistically significant effect was reported in one research project carried out in a study abroad context (Heinzmann et al., 2015) and another in a home context (Ishii, 2009); that is, students with a higher level of language proficiency were significantly more successful in ICC learning. Also, language proficiency was shown not to have an effect in four studies conducted in a study abroad context (e.g., Cubillos & Ilvento, 2018; Martinsen, 2011).

**Table 9 Effects of learner variables across contexts**

<table>
<thead>
<tr>
<th>Learner variables</th>
<th>Effective Study abroad</th>
<th>Effective Home context</th>
<th>Not effective Study abroad</th>
<th>Not effective Home context</th>
<th>Not analyzed Study abroad</th>
<th>Not analyzed Home context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language proficiency</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>Age</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Gender</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>Attitudinal, affective, or behavioral factors</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>Other variables (parents’ educational background and learners’ location)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>Ethnicity, race or nationality</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>30</td>
</tr>
</tbody>
</table>

Age, as another learner variable, was investigated in six studies (e.g., Busse & Krause, 2016; Medina-López-Portillo, 2004). It was found to have been
effective in three studies (e.g., Medina-López-Portillo, 2004; Scally, 2015) implemented in study abroad contexts; to put it more precisely, individuals’ age displayed a statistically significant negative correlation with their ICC competence (see Heinzmann et al., 2015; Medina-López-Portillo, 2004; Scally, 2015). However, the age factor was found to have exerted no effect in the other two studies in the same context (e.g., Palmer, 2013) and one study in a home context (see Busse & Krausein, 2016). Regarding gender, which was examined in five studies (e.g., Berg, 2009; Heinzmann et al., 2015), it can be seen in Table 7 that it was only effective in three study abroad contexts (e.g., Heinzmann et al., 2015; Medina-López-Portillo, 2004); however, the findings were somewhat contradictory. For example, Heinzman et al. (2015) and Berg (2009) reported on females’ significantly better ICC performance, while Medina-López-Portillo (2004) found male students’ statistically significant higher ICC. Yet, gender was found to play no part in one study abroad context (see Palmer, 2013) and another study in a home context (see Mirzaei & Forouzandeh, 2013). Previous contact or knowledge, explored in eight studies (e.g., Busse & Krause, 2016; Scally, 2015), was reported to be more influential in study abroad contexts in five studies (e.g., Medina-López-Portillo, 2004) in comparison with only two home context studies (e.g., Peng & Wu, 2016). However, this variable was found to be not effective in one study abroad investigation (see Bloom & Miranda, 2015). In general, students who had contact with individuals from other cultures or experienced living abroad tended to have significantly higher ICC and performed better in ICC learning programs (see Heinzmann et al., 2015; Hismanoglu, 2011; Medina-López-Portillo, 2004).

We also examined the effects of attitudinal, affective, and behavioral variables. These variables, examined in four studies (see Table 9), were found to be effective only in three home context studies (e.g., Ishii, 2009; O’Dowd, 2003) and not effective in only one study abroad context (see Martinsen, 2011). For example, Ishii (2009) reported some significant interaction effects between individual differences and treatment condition on cross-cultural attitudes. Mirzaei and Forouzandeh (2013) evidenced a strong statistically significant positive correlation between L2 learner ICC and motivation. Furthermore, O’Dowd (2003) reported that the ability of students to build up a personal relationship with their partners, their sensitivity to their partners’ needs, their communicative style, and their capacity to produce engaging, in-depth correspondence were found to be effective and led to ICC development. Ethnicity, race, or nationality are other factors which were scarcely investigated in the studies in our corpus. It was uncovered that they were statistically significant variables in two studies conducted in the study abroad context (see Heinzmann et al., 2015; Medina-López-Portillo, 2004). Yet, Heinzmann et al. (2015) did not specify the details of the effects of students’ nationality on their ICC and only reported it as an explanatory variable in learners’ ICC. Medina-López-Portillo
reported the importance of learners’ race and ethnicity in both quantitative and qualitative data; however, no ample detail was provided in this respect. Finally, the category named other variables included two variables, that is, individuals’ parents’ educational background and location, which were rarely examined. The variable of parents’ educational background proved to be statistically significant in one study abroad context (see Heinzmann et al., 2015). It was found that students whose parents had tertiary education were significantly more successful than others. Moreover, learners’ location was analyzed in one study implemented in a home context (see Tudini, 2007), which compared off-campus versus on-campus students’ communication patterns and revealed off-campus students’ significantly better performance in intercultural communication.

6. Discussion

The aim of this study was to synthesize 56 studies to heighten the understanding of ICC development based on study abroad and home contexts, instruction, and learner variables. This synthesis revealed that a number of learner variables are implicated in ICC acquisition, including age, gender, L1 background, context of education, language proficiency, previous contact or knowledge, and attitudinal and behavioral variables. The first set of findings relates to context and instruction for ICC development. The findings showed that half of the studies were conducted in either the study abroad or home context. The role of these two contexts in second language acquisition, including ICC, has received great attention in many studies in the past two decades (e.g., Collentine & Freed, 2004; Isabelli-García & Isabelli, 2020; Kinginger, 2009, 2013; Mitchell & Tyne, 2021). These studies have unveiled the role that classroom and/or study abroad have on self-regulatory strategies of L2 learners (e.g., Allen, 2013), intercultural mindset (e.g., Jackson, 2013), oral proficiency (e.g., Magnan & Back, 2007), grammatical competence (e.g., Lafford, 2006), and learner motivation (e.g., Bataller, 2010). In our corpus, the effects of home vs. study abroad contexts were not investigated comparatively in a single study. Rather, each study was focused on either context. However, it was found that instruction in the home context was the prevailing practice in ICC development. In other studies, not included in our corpus, researchers have repeatedly demonstrated the positive impact of studying abroad on ICC development (e.g., Lee, 2018; Pascarella & Terenzini, 2005). It is argued that intergroup contact during the study abroad experience helps reduce cultural prejudice, improves intercultural competence skills, and facilitates intercultural understanding and relations despite cultural, ethnic, and national differences.
Instruction vs. no instruction constituted another part of the first set of findings. It was found that the majority of the studies reviewed reported on instruction in the classroom, while other studies for ICC development included no instructional phase. As to instruction-based ICC development, the studies we reviewed included 42 instructional interventions. Instructional tasks using technology and online environments provide space for more contact with other users of L2 in real-life contexts, more exposure to authentic interactions, and increased engagement in intercultural negotiation for moving from ethnocentrism to ethnorelativism. This is one of the main reasons for the burgeoning interest in explicit instruction, including the use of online social networking, to scaffold learners’ ICC development. Furthermore, it helps learners gain cultural awareness, particularly when it draws on social networking to increase their chances of engaging in negotiation of meaning, discussing cultural issues, and eliciting meanings of cultural behavior from L2 speakers (O’Dowd, 2012).

The second set of findings related to learner variables considered with respect to developing ICC. The learner variables that were analyzed in the studies reported in our synthesis included learner gender, age, L1 background, language proficiency, nationality, affective and behavioral factors, previous contact/knowledge, and parents’ educational background. However, in our corpus, these variables were not represented in the majority of the studies and/or were not explored to the same degree for their effects on ICC. L1 background, gender, and language proficiency were not reported in many ICC studies, although they constitute influential variables in second language acquisition (Dörnyei & Ryan, 2015; Ellis, 2015; Norris & Ortega, 2000). Also, despite the importance of learner variables such as motivation, willingness to communicate, identity, and language learning strategies in second language acquisition studies (Dörnyei & Ushioda, 2009; MacIntyre et al., 2011; Norton & De Costa, 2018; Oxford, 2016), they were not among the variables reported in our corpus. This under-representation or non-representation of key learner variables results in our poor understanding of how ICC is developed in home and study abroad contexts and why there are differential gains in ICC among learners.

The overall findings indicated that gender, age, and language proficiency were among the learner variables mostly described or observed for their impact on ICC development although the impact varied across home and study abroad contexts. Also, our findings revealed that most studies reported on ICC development without measuring the role of learner variables. Numerous studies not included in our analysis have demonstrated a mixed picture with respect to the impact of gender on intercultural competence (Goldstein & Kim, 2006; Holm et al., 2009; Mahon, 2006; Solhaug & Kristensen, 2020; Solhaug & Osler, 2017; Tompkins et al., 2017; Vande Berg et al., 2009). One major finding concerned
gender differences in intercultural competence. In our analysis, gender was effective in three studies but not in the others. It was found that females developed higher intercultural skills following instruction (Heinzmann et al., 2015). Similarly, females showed significant gains in the intercultural development inventory (IDI). These mixed findings on gender differences are also evidenced in other studies not included in our synthesis. A number of researchers whose studies were not considered in our review reported no gender differences in intercultural competence and sensitivity (e.g., Chocce et al., 2015; Morales, 2017). For example, the studies conducted by Chocce et al. (2015) and Morales (2017) indicated that the development of intercultural sensitivity is not significantly affected by gender. However, numerous studies have reported that females show higher intercultural sensitivity (Fabregas et al., 2012; Holm et al., 2009; Westrick, 2004). For instance, Holm et al. (2009) found that female students assessed their intercultural sensitivity higher than male students did. Also, Solhaug and Kristensen’s (2020) study revealed that female students exhibited substantially higher intercultural competence (intercultural empathy and awareness) than their male counterparts. In another study, Tompkins et al.’s (2017) mixed methods survey indicated that women participants ranked higher overall in their intercultural sensitivity than men, which they attribute to women’s more motivation to understand, appreciate, and accept differences among cultures. The effect of gender was also found in the studies by Demircioğlu and Çakir (2016) and Bečirović et al. (2019), who reported a significant impact of gender on intercultural sensitivity.

As to the age variable, our synthesis showed that age impacted intercultural competence in some, but not all, studies, particularly those conducted in study abroad contexts. Mixed findings were reported in other studies not listed in our corpus (e.g., Schwarzenthal et al., 2017; Williams, 2005; Yilmaz & Wujiabudulai, 2019). Some studies reported that no age differences existed in the development of intercultural competence. For instance, Schwarzenthal et al. (2017) found that self-reported intercultural competence was unrelated to age. Similarly, Yilmaz and Wujiabudulai’s (2019) study showed no significant differences in participants’ intercultural sensitivity in terms of age. By contrast, Williams (2005) reported that age was among the major factors influencing change in students’ intercultural communication scores. Nonetheless, the majority of the reviewed research in the present study focused on adult language learners, as, in general, most of the conducted studies investigated the ICC development among upper-level and older L2 learners rather than beginners or young language learners. This was the case despite the fact that the importance of ICC in L2 primary classes has been highlighted in numerous studies (e.g., Acevedo, 2019; Byram & Doyé, 2005; Moloney, 2007). Cushner (2015) justified this underrepresentation by emphasizing the complexity of the construct for young learners.
and claiming that the majority of the existing ICC assessment tools might not be appropriate for young L2 learners.

Our synthesis research showed that the language proficiency of participants was not reported in the majority of the studies. Of the six studies outlining the effect of language proficiency, a significant effect was found in only one study. Language learning, along with corollary development of language proficiency, is likely to interact with intercultural development. However, its effect is not strongly supported in our pool of studies. This finding echoes intercultural competence researchers’ argument that there are preconditions for the effect of proficiency on ICC (Bennett, 2008; Byram & Feng, 2004; Davies et al., 2005). Raising this issue, Bennett (2008) argued that language learning and hence language proficiency may not be a sufficient condition for intercultural development. In the same vein, Davies et al. (2005) maintained that the effect of foreign language learning depends on the degree to which the curriculum is intercultural in orientation. As such, Perry and Southwell (2011) concluded that many studies have not been able to substantiate a causal relationship between language learning and intercultural development (e.g., Byram & Feng, 2004).

Learners’ L1 background, L2, and nationality were among other variables analyzed in this synthesis research. Although the number of studies targeting these variables was very limited, it has been found that in some cases individuals’ L1, nationality, and race can affect their ICC (see Heinzmann et al., 2015; Medina-López-Portillo, 2004). As highlighted in Medina-López-Portillo’s (2004) study, during study abroad students are confronted with relating to their race and ethnicity. Owing to their race, those of European-American ethnicity might believe they are privileged over other students, including African-Americans. In fact, due to the link between race and culture, the results do not seem unreasonable. As to L2, we found that about half of the studies investigated the ICC development of learners of L2 English followed by L2 Spanish. The predominant focus on L2 English in ICC studies sounds logical due to its status as an international language (McKay, 2018; McKay & Bokhorst-Heng, 2008; Seidlhofer, 2007; Sharifian, 2009). Also, English is the only language with its non-native speakers surpassing native speakers in number. In view of this, numerous studies have sought to shed light on ICC development in the case of learners and users of English (e.g., Chen & Yang, 2016; Jackson, 2011; Wang & Kulich, 2015; Yu & Van Maele, 2018). In our corpus, Spanish ranked second in the number of studies devoted to ICC development. With about 20 countries listing Spanish as their official language and Spanish being the second most spoken language after Mandarin, there is good reason to learn Spanish and use it. This status of Spanish as the target of many L2 learners has motivated numerous researchers to study the ICC of L2 Spanish users and learners (e.g., Helm, 2009; Lee, 2012; Lenkaitis et al., 2019; Martinsen, 2011).
A set of other learner variables were analyzed in our synthesis, including attitudinal, affective, and behavioral factors, individuals’ parents’ educational background, previous contact and knowledge, and ethnicity. The findings indicated greater effectiveness of attitudinal, affective, or behavioral factors in home contexts, as illustrated in the studies by Ishii (2009) and O’Dowd (2003). Ishii (2009) found that task-based intercultural instruction on intercultural competence was effective in Japanese secondary EFL learners’ ICC. Similarly, O’Dowd’s (2003) study showed the impact of a Spanish-English e-mail exchange on intercultural learning in the home context. This is in line with other studies that have examined the interface between attitudes and intercultural competence and reported mixed findings (e.g., Vuksanovic, 2018). Although both Byram’s (1997) and Deardorff’s (2006) model of intercultural competence includes an attitudinal component, the results of Vuksanovic's (2018) study demonstrated no significant correlation between the two variables. However, Smakova and Paulsrud (2020) found that their respondents’ effective and appropriate communication with people of other cultural backgrounds was fostered by cognitive, affective, and behavioral skills.

7. Conclusion

This synthesis research set out to investigate research on the development of ICC in study abroad and home contexts and the nexus between ICC and learner variables. Our review illustrates that both contexts were examined to trace learners’ ICC development. While the majority of the studies provided evidence for the need for instruction, a number of them showed that exposure-based non-explicit instruction can be influential in gaining ICC. A great number of studies reporting on ICC instruction substantiates the mounting significance of technological facilities for creating spaces for intercultural awareness. Also, the studies conducted in the study abroad context emphasize the role of this context in creating opportunities for more intercultural contacts and providing relevant input. Moreover, the findings of this synthesis research on learner variables illustrate the complexity of their effects on ICC gains and the underrepresentation of most variables in ICC research. Out of the studies reviewed, 15 reported on the effect of one learner variable, whereas the others did not report on this effectiveness. This indicates that learner variables, a key concept in second language acquisition, need to feature more prominently in ICC research to advance our understanding of their contribution to ICC development.

While the findings of this synthesis research may have revealed the contribution of learner variables to the development of ICC, it has some limitations. First, our inclusion criterion was to analyze studies published between 2000-2020. A wider time span could be considered in future research to provide a
chronologically clearer picture of context, instruction, and learner variables in ICC studies. Second, we excluded book chapters, short studies, and dissertations. Stronger evidence might be provided if other researchers include these three data sources in their analysis. Third, we included studies from journals published by selected leading international publishers. Further studies could enlarge this corpus by considering other publishers, such as John Benjamins and Equinox, as well as journals published by universities and institutions. Finally, as studies included in our research were limited to those that reported on L2 learner participants, future research could address the ICC development of students from non-language fields of education.
References


References marked with an asterisk indicate studies included in the systematic review.


