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Influence of Family Dialect on English Pronunciation and Intonation: A Study of Language Acquisition Among Chinese EFL Learners

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ABSTRACT

This paper investigates the impact of family dialect on the English pronunciation and intonation of Chinese learners by focusing on dialect differences in the process of language acquisition. The method applied was qualitative, involving interviewing ten Chinese translation major university students about their experiences concerning dialect use, parental support, and self-directed learning strategies. Through thematic analysis, four key themes were identified: (1) Dialect Usage and Influence on Pronunciation, where most participants reported phonological transfer effects leading to a "Chinglish" accent; (2) Parental Support, highlighting variations in family involvement in English learning; (3) Learning Strategies, with learners utilizing self-monitoring, media exposure, and shadowing techniques to improve pronunciation; and (4) Challenges and Solutions, where participants expressed difficulties due to a lack of native English-speaking environments but developed compensatory strategies. It supports the theoretical implications of Bronfenbrenner, stressing the role of family in linguistic development. Recommendations are made for dialect-sensitive teaching strategies using emerging education technologies to assist learners, educators, and families in improving English pronunciation and intonation acquisition.

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1. INTRODUCTION

The acquisition of a second language is a complex phenomenon influenced by a variety of factors, including linguistic background, formal schooling, media exposure, and social interactions. Among these, the influence of family dialects is particularly significant, as it provides the first linguistic input and shapes phonetic perception at an early stage. The large linguistic difference between English and Chinese further complicates pronunciation

and intonation acquisition for Chinese learners [1]. As representatives of two fundamentally different language families, English and Chinese present specific challenges, particularly in phonological transfer and speech rhythm [2].

While formal schooling plays a crucial role in providing structured language instruction, it does not always compensate for deeply ingrained phonetic patterns established by early dialectal exposure. Learners from different dialect backgrounds often struggle with English pronunciation despite years of formal education, as phonological habits formed in early childhood tend to persist [3]. For example, students from southwestern China, whose dialects have markedly different phonetic structures from Mandarin, frequently encounter difficulties in adjusting to English stress patterns and consonant articulation, even after extensive schooling [4]. This suggests that dialectal influence may override some of the corrective efforts provided in formal education.

Beyond schooling, media exposure is another major factor influencing English pronunciation and intonation. The rise of digital platforms and access to English-language content, such as movies, TV series, music, and online courses, has provided learners with opportunities to improve their pronunciation through imitation and passive learning [5]. Studies indicate that learners who actively engage with media-based learning methods, such as shadowing English dialogues from TV shows or practicing with online pronunciation apps, demonstrate better pronunciation accuracy compared to those who rely solely on traditional classroom instruction [6]. However, media exposure alone does not guarantee accurate phonetic learning, as learners may still be influenced by family dialects, which shape their phonemic perception and articulation habits from a young age [1].

Additionally, social interactions—including peer influence, teacher feedback, and exposure to native speakers—also contribute to pronunciation development. Learners who have access to native English-speaking environments, language exchange programs, or interactive pronunciation training tend to develop better intonation patterns and stress timing than those who rely on textbook-based instruction [7]. However, such opportunities are often limited for learners in regions where dialectal influence is strong and Mandarin or English is not commonly spoken at home. In these cases, family dialects may continue to reinforce non-standard phonetic features, making it harder for learners to adopt native-like pronunciation patterns.

Given these considerations, this study seeks to explore the specific role of family dialects in shaping English pronunciation and intonation among Chinese learners, comparing their impact with other linguistic influences such as schooling, media exposure, and social interaction. By examining how dialectal features interact with formal education and self-directed learning strategies, this research aims to provide insights into how learners can overcome dialect-based pronunciation barriers and develop more native-like English speech patterns. It further intends to offer practical recommendations tailored for Chinese learners to mitigate the effects of dialectal transfer and enhance their confidence in spoken English. Ultimately, the study seeks to deepen our understanding of how linguistic environments, beyond just formal instruction, shape second language acquisition, emphasizing the need for dialect-sensitive teaching approaches in English language education in China.

Theoretical Framework and Research Question

The present study was underpinned by Bronfenbrenner's socio-ecological theory, which was propounded in the 1970s that human development is affected by layers of connected environmental systems, from the close settings of family and school to more extended social ones [8]. The theory further postulates that because human beings are not solitary but rather surrounded by complex layers of interacting systems, their developing and learning processes are shaped through dynamic interactions across those multiple systems. The microsystem is the innermost layer, characterized by direct interactions within the family itself [9]. It constitutes the primary source of linguistic exposure and socialization for children. With respect to language acquisition theory, this explains how dialects used within a family environment can powerfully influence learners' linguistic abilities, especially pronunciation and intonation [10]. For example, if a child is reared in an environment that has a dialect with phonetic features that make it peculiar, then he will tend towards a particular pattern of speech that might create or obstruct his ability to master a foreign tongue such as English. However, given the limited empirical qualitative research in the field of phonological acquisition, the present study aims to explore how Chinese EFL learners develop their English pronunciation and intonation with regard to their family dialect influence. Therefore, the present study is guided by the following research question:

RQ : What is the impact of family dialect on the English pronunciation and intonation of Chinese EFL learners during the process of language acquisition?

2. LITERATURE REVIEW

2.1. First Language Interference and Phonological Transfer

First language interference and phonological transfer are critical concepts in understanding the pronunciation and intonation challenges faced by second language learners [11]. The Contrastive Analysis Hypothesis (CAH) suggests that phonetic and phonological features from a learner's native language often transfer to the target language, leading to predictable pronunciation errors [12]. Chinese learners of English, for instance, frequently struggle with sounds such as /θ/ and /ð/, which do not exist in Mandarin, leading to substitutions like /s/ or /z/ for /θ/ and /d/ for /ð/ [13]. Additionally, the rhythmic structure of English, which follows a stress-timed pattern, contrasts with Mandarin's syllable-timed framework, making it difficult for learners to adopt English prosody and intonation patterns accurately [14]. These phonological differences often result in a distinct "Chinglish" accent, reflecting the impact of native-language phonetic structures on English speech.

While some studies emphasize the negative implications of first language interference, others suggest that bilingualism and multilingualism can offer cognitive advantages in second language acquisition [15], [16]. Traditionally, phonological transfer has been viewed as a unidirectional process, where elements from the first language interfere with second language pronunciation. However, recent studies challenge this assumption, particularly in multilingual contexts, where learners exhibit cross-linguistic interactions among multiple linguistic systems [1]. Unlike monolingual learners, who

primarily experience direct phonetic transfer from their first language (L1) to their second language (L2), multilingual learners may integrate phonetic elements from multiple languages, sometimes resulting in hybridized accents or selective adaptation of phonetic features.

For instance, learners who speak Mandarin and a regional dialect before acquiring English often develop distinct phonological interference patterns compared to monolingual Mandarin speakers [17]. These learners may transfer features from both their dialect and Mandarin into English pronunciation, creating more complex pronunciation challenges than those faced by monolingual learners. However, research also suggests that multilingual individuals tend to develop greater phonological awareness, which can help mitigate pronunciation difficulties [18]. This aligns with the Linguistic Interdependence Hypothesis, which posits that phonetic skills in one language can positively influence pronunciation accuracy in another if learners have strong metalinguistic awareness [19].

Some studies further indicate that multilingual learners may have an advantage in distinguishing new phonetic contrasts and adapting to native-like pronunciation faster than monolingual learners [20]. Kartushina and Mayor [21] found that multilingual individuals demonstrated greater flexibility in adjusting their intonation patterns to match native speakers, likely due to their exposure to varied phonetic systems. This suggests that while first language interference can create obstacles, multilingual speakers may develop compensatory strategies that enhance phonetic plasticity in second language acquisition.

These findings indicate that first language phonological transfer is not always a hindrance but can sometimes serve as a resource for pronunciation learning, particularly for multilingual learners who develop adaptive mechanisms. This perspective challenges the traditional notion that first language interference always negatively affects second language pronunciation. Instead, it highlights the need for a context-sensitive approach to pronunciation teaching, recognizing that learners with different linguistic backgrounds may require varied instructional methods. In the case of Chinese learners, those who speak regional dialects alongside Mandarin may require additional pronunciation training tailored to their specific phonetic challenges, as their exposure to multiple phonological systems can shape their English pronunciation in distinct and complex ways.

2.2. Regional Variations in English Proficiency

Regional variations in English proficiency across China reveal some clear divergence attributed to cultural, economic, and educational reasons. Research indicates that urban areas, especially cities along China’s coastlines of Beijing and Shanghai, possess stronger English proficiency skills than rural or southwestern areas [5]. The teaching of English language courses in the cities is customarily better funded, with a more professional teaching class and greater exposure to the language through media and businesses. On the other hand, language learners representing the southwestern regions of Yunnan and Guizhou often report reduced ability levels, especially in pronunciation and intonation [10]. A study by Duyen [1] shows that language learners frequently introduce considerable regional accents into their English spoken discourse, resulting in high degrees of difference in their articulation and stress patterns.

Also, the existence of Chinglish among different regional speakers illustrates that these individuals have different phonological challenges. For instance, studies show that students who hail from southwestern China tend to mispronounce many English words because their dialects create rules for pronunciation that hinder effective communication [22]. Besides that, regional dialects influence learners' practice and repetition of standard English pronunciation because regional dialects, to some extent, influence the way students learn or practice standard English pronunciation [6]. This regional disparity speaks to a basic need for differentiated instruction models that factor in such differences to prepare students with techniques that serve to overcome unique linguistic backgrounds.

2.3. Chinese Family Dialect and English Pronunciation

Dialects of Chinese exert a significant influence over English pronunciation, which proves particularly important in research areas touching on family use of the language [23]. Children primarily use familial dialects; hence, they affect the children's phonetic perception and speech production behaviors. Research indicates that children growing up in an environment dominated by dialects tend to acquire features of pronunciation that reflect the linguistic environment in which they are brought up, impacting their ability to acquire phonetic connotations of the English language [24]. Moreover, studies demonstrate that children exposed to regional dialects tend to find it difficult to articulate English phonemes that are quite different from their lexically inherent phonetic inventory [25].

The significance of parental support and the utilization of language within the home environment is paramount [26]. Families that promote engagement with English and offer linguistic materials, including literature and dialogues, can enhance their offspring's acquisition of the English language. In contrast, families that primarily communicate in regional dialects may unintentionally restrict their children's exposure to standard English phonetics, resulting in the development of ingrained pronunciation patterns that can be challenging to rectify in adulthood [27]. The family environment, as proposed by Bronfenbrenner's socio-ecological framework, plays a pivotal role in influencing learners' linguistic experiences, underscoring the necessity of a nurturing linguistic context that promotes the development of English language skills [28]. This relationship between familial dialect and enunciation underscores the significance of incorporating an awareness of family language practices into English language instruction, with the objective of reconciling the disparities between dialectical influences and standard English articulation.

3. METHOD

3.1. Research Design

This study used a qualitative research design to investigate the effect of Chinese family dialects on the pronunciation and intonation of English learners underpinned by Bronfenbrenner's socio-ecological theory. A constructivist paradigm guided the study, recognizing that learners' experiences are shaped by the social and linguistic environments in which they are embedded [29]. Interviews were conducted with Chinese university students majoring in translation in order to gather insight into their experience and perception. The qualitative research is appropriate for this study since it allows an in-depth

understanding of learners' personal experiences and differences of language use in their families [30]. It also allows a contextualized analysis of how dialects affected the pronunciation of English.

3.2. Participants

The study targeted a sample of 10 English learners, selected through convenience sampling [31]. The participants were undergraduate and graduate students majoring in translation at Dalian University of Foreign Languages, all of whom had attained at least an intermediate level of English proficiency, making them suitable for examining the impact of Chinese family dialects on pronunciation and intonation. The inclusion of translation students was particularly relevant, as their academic background suggests a heightened awareness of linguistic differences, providing rich qualitative insights into pronunciation challenges and dialectal influences. In qualitative research, sample size adequacy is determined by the depth and richness of data rather than numerical representation [32]. Prior studies indicate that a sample of 10 participants is sufficient for qualitative interviews, particularly when using thematic analysis, as it allows for detailed exploration of participants' experiences without data saturation loss [33].

However, potential biases must be acknowledged, as the use of convenience sampling may have led to selection bias, with participants potentially having greater motivation or awareness of language learning issues, thus skewing findings toward more reflective or linguistically engaged learners. Additionally, since all participants were translation majors, their linguistic proficiency and metalinguistic awareness may not fully represent the broader population of English learners in China. Regional diversity in dialect exposure was not strictly controlled, meaning that the degree of dialectal influence on pronunciation may vary among participants. To mitigate these biases, the study employed semi-structured interviews, allowing for a diverse range of perspectives and reducing the likelihood of guided responses. Future research could enhance generalizability by incorporating a larger and more varied participant pool, including learners from different academic disciplines and regions, to provide a broader perspective on dialectal influence in English pronunciation acquisition.

3.3. Instruments

Semi-structured interview questions were employed in this study to analyze the effect of family dialects on pronunciation and intonation in English learners. These interview questions were adapted from previous work conducted by Wu [10], where the aforementioned work dealt with related topics concerning language learning and pronunciation difficulty issues. Adaptation of these questions renders them relevant to Chinese learners and capable of eliciting in-depth responses on how family dialects influence the English learning experience for such students.

The two major areas covered in the interview questions were family background and strategies for learning and attaining proficiency in English. Specific questions related to dialect usage at home, parental support for learning in English, and access to, and, particularly, resources intended to teach pronunciation and intonation. The participants

were also asked to evaluate their overall level of proficiency in English and point out what was difficult to improve. It was an understanding of the two areas of pronunciation and intonation.

To achieve the above purpose, content validity was obtained by the interview questions since they had received feedback and approval from an expert in the field of acquisition of the English language [34]. That way, the review process by an expert affirmed that these questions were targeted to the objectives of the present study and also capable of generating information that was needed about family dialects and their impact on English pronunciation. The expert also provided recommendations for fine-tuning the wording and structure of the questions so that they could be effective in their application, thus ensuring that participants would embrace the instruments willingly to yield reliable data [35].

3.4. Data Collection

Online Interviews were conducted via Tencent Meeting, a commonly employed means in China for educational purposes [36]. It was used to facilitate the easy gathering of data, first by recording and then in its transcription form and documentation. Participant 3 was interviewed in Chinese. The rest nine participants were interviewed in the English language. The Chinese transcript of the interview was translated to English using Google Translate and later went through careful editing by the researchers to maintain the accuracy and integrity of the responses from the participant.

3.5. Data Analysis

The interview data transcribed formed the basis for thematic analysis, which was able to reveal major dimensions and subthemes of the effects of family dialects on the pronunciation and intonation of English learners. Data coding followed a systematic process of generating categories from responses such as themes of family language environment, parental support, exposure to English, and self-perceived proficiency [37].

The coding process involved three main phases: open coding, axial coding, and selective coding [38]. In the open coding phase, the interview transcripts were read line-by-line to identify initial codes related to dialect use, English learning support, and experiences with English pronunciation and intonation. Examples of initial codes included "*use of home dialect*," "*Mandarin mixing*," "*family support for English*," "*lack of English environment*," and "*shadow reading practice*." During the axial coding phase, related codes were grouped into broader categories or themes, such as "*Dialect Exposure and Usage Patterns*, " "*Parental Support in English Learning*, " "*Self-Learning Strategies*, " and "*Challenges and Improvements in Pronunciation and Intonation*. " Finally, in the selective coding phase, core themes were refined and connected to the central phenomenon of the study—how family dialect influences EFL learners' English pronunciation and intonation. This structured coding process ensured a systematic and grounded understanding of the participants' language backgrounds, learning environments, and strategies for overcoming phonetic challenges in English acquisition.

Thematic analysis enabled detailed exploration of how both family dialects and environmental elements would have implications on learners' pronunciation and intonation of the English language, thus gaining a full insight into the phenomenon.

3.6. Ethics

Ethical considerations are integral to this particular study. Copies of the consent form were distributed to participants, indicating the purpose of the research, ensuring that their participation was indeed voluntary. Confidentiality and anonymity were further upheld, with all personal information kept secure, and the names anonymized in the final report. They were made aware of their right to withdraw from the study at any time without any consequences.

4. RESULTS AND DISCUSSION

4.1. Overview

The thematic analysis focused on four key themes (See Table 1): Dialect Usage and Influence on Pronunciation, Parental Support, Learning Strategies, and Challenges and Solutions.

Table 1. Thematic Analysis of Interview Results

Theme	Sub-theme
Dialect Usage and Influence on Pronunciation	● Exclusive use of dialect at home ● Mixed use of dialect and Mandarin ● Minimal dialectal influence on English pronunciation
Parental Support	● Financial and material support for English learning ● Enrollment in English training programs ● Encouragement for study abroad opportunities ● Lack of direct parental support for pronunciation improvement ● Parents are unable to provide English resources ● Mental encouragement but limited practical help
Learning Strategies	● Use of multimedia (TV shows, movies, podcasts) ● Engagement with English music and news ● Passive learning through exposure ● Shadowing and self-monitoring techniques ● Repetitive listening and imitation of native speakers ● Self-recording and reviewing pronunciation
Challenges and Solutions	● Lack of an English-speaking environment ● Limited interaction with native speakers ● Challenges in self-assessing pronunciation ● Recording and reviewing speech as a self-improvement method ● Seeking corrections from teachers or native speakers ● Adapting strategies to improve pronunciation over time

The subjects came from all over China, from Jiangxi to Liaoning, Hebei to Anhui, Shandong, Ningxia, Sichuan, and Zhejiang. These participants formed a geographically representative sample and included dialects and linguistic experiences across the board. These regional differences raise yet another layer of complexity to their English language learning, not least of which is the impact of family dialects on their pronunciation and

intonation. Among these, the role of dialect, as well as variations in the extent of parental involvement, their self-access strategies, and problems of achieving native-like speech, were noted, revealing how rich the interaction between their linguistic environment, personal effort, and accessible resources can be.

4.2. Dialect Usage and Influence on Pronunciation

A major finding in this theme is that the dialects of the family used by the participants are capable of affecting greatly affect their pronunciation and intonation in English. Most of the participants, like those from Jiangxi and Sichuan provinces, answered that they speak their dialects at home and that it leads to varying degrees of "Chinglish" in their English speech. Participant 1, from Jiangxi, said, "*I do not talk with my parents in Mandarin. Even though they know how to speak Mandarin, they use the dialect for communication*.". Participant 8, from Sichuan province, further elaborated this point: "*I primarily speak the dialect at home*," which also shows how dialect use persists into adulthood and influences English pronunciation. The distribution of participants also reveals regional variations in relation to where dialect impacts on English pronunciation. For instance, Participant 2 hails from Liaoning province and could express both Mandarin and the local dialect of Anshan, which contained "*intonation differences*" from the standard spoken Mandarin, influencing their pattern of speech in English. Meanwhile, Participant 3, from Hebei province, reported that their language was a mix of Mandarin and dialect, which influenced pronunciation because it combined the sounds of the two languages.

This result illustrates how much dialect penetrates English learners' linguistic perception and reveals the difficulty that they face in the takeover of standard English phonetics. Dialect influence on pronunciation is most salient when it comes to a region with an advanced phonological system, such as the rural areas in southwest China, among participants from Jiangxi and Sichuan provinces might have stronger "Chinglish" accents. This shows that students from rural areas with less usage of Mandarin and mostly relying on dialect might also find it harder to spell out English pronunciation.

4.3. Parental Support

There was differentiation in the support provided to the English learners by their parents to acquire the English language, from financial support and assistance to mental encouragement. Participants whose backgrounds were more replete with urbanization, such as Participant 2, Liaoning, or Participant 7, Ningxia, stated that they received major input from their parents. As Participant 2 said, "*My father shares good videos about English pronunciation or learning when he comes across them on WeChat*." This indicates the active role parents may engage in to provide access to learning resources, mainly in more connected households, through digital means. On the other hand, participants hailing from rural or less economically developed regions report a lack of direct material support to learn English. For example, Participant 5 is from Jiangxi and remarks, "*They provide mental support. Since my parents are farmers, their expectation for me is to study hard, which includes learning English*." This is the reality for many learners who stay in rural

China because their parents are not in a position to afford this, or even aware of what English learning materials to provide.

This variability in parental support is of particular significance in this context because it directly affects the learner's access to language resources, above all, to pronunciation and intonation resources. In the case of participants such as Participant 4 from Anhui, whose parents "*enrolled me in foreign language training courses*", the support provided had laid a foundation for the potential subsequent advanced learning in life. The experiences highlighted disparity between participants from rural or urban regions and suggest increased access to resources and education for parents regarding the value of pronunciation practice for learners from less privileged backgrounds.

4.4. Learning Strategies

Participants make extensive use of self-learning strategies to enhance their skills in English, relying heavily on multimedia: films, television programs, podcasts, and music. This is true for all the participants irrespective of their region. Participant 1, from Jiangxi Province, thinks his English pronunciation and intonation have improved because of "listening to English music such as *Yesterday Once More*, drama such as *Friends*, and movies such as *Fast & Furious*". Participant 10, from Zhejiang province, says, "*Learning is repeating. One will excel after zillions of practice.*". The shadowing technique, whereby learners mimic native speakers' pronunciation and intonation, was presented by most participants as particularly effective. Participant 9, from Jiangxi Province, asserts that "*I practice spoken English through shadow practice, where I repeat what I hear*". It is an excellent strategy, especially for those who do not have direct access to native speakers, to practice and hone their English speech.

Meanwhile, the media- and shadowing-based approaches revealed systematic and consistent application by all participants, irrespective of whether they were from an urban or rural environment, thus leaving emphasis that these approaches are feasible and versatile to be used in different learning settings. Perhaps the essence of self-directed learning is to supplement the formal education given that learners, especially those students from regions like Jiangxi province and Sichuan province, where quality English teaching facilities may not reach their optimum standard, need self-reliance and self-directed learning in English skills acquisition. This finding suggests that the encouragement of more multimedia-based learning may well serve to fill such a gap for learners with more limited formal exposure to native speakers of English.

4.5. Challenges and Solutions

One of the most critical issues that participants from different regions encounter is an evident lack of an engaging environment with native English speakers. Participant 2 from Liaoning province claims this challenge as follows: "*I lack exposure to native English speakers, so I often cannot determine if my pronunciation and intonation are accurate*" Participant 7 from Ningxia province similarly finds it "*difficult to pronounce some English sounds accurately*" because of the lack of an encouraging language environment. Others, like Participant 6 in Shandong province, found specific pronunciation

tricky at times, and especially when encountering "*differences in vocabulary and intonation between British and American English*". Such issues describe a more general issue of lack of access to native speakers and institutionalized pronunciation teaching, which the students from rural Jiangxi province and Sichuan province.

To deal with these challenges more effectively, many respondents came up with innovative substitutes. For example, Participant 10 from Zhejiang province wrote, "*I record and review my speech to identify mistakes*", which helps him to exercise in their quiet surroundings. This approach allowed participants to practice independently, though some acknowledged its limitations in the lack of real-time feedback. Participant 9 from Jiangxi province observed that he could apply shadow reading to avoid committing pronunciation mistakes.

5. DISCUSSION

5.1. Synthesis of Findings

This study reveals that the family dialect influences the Chinese learner in affecting their English pronunciation and intonation, especially where it differs significantly from Mandarin. The number of participants from Jiangxi province, Sichuan province, and other areas who have maintained the use of dialects in their homes reveals a further way in which phonetic features of those dialects continue to pass into their English pronunciation and contribute to a "Chinglish" accent. Especially those from Jiangxi explained that their pronunciation was not simply native-like because their dialect continued to influence it. This is a crucial concern in L2 learning for learners whose L1 or dialect has a markedly different phonological system from that of English.

The role of family dialect as an influencing mechanism for the development of English pronunciation will arise from the principle that "the various dialects, or main forms of speech, being the first developed and the most frequently used in early language acquisition, lay down a phonetic pattern which is not easily modified in subsequent life" [39]. This can be especially noticeable in respondents who claim not to have much Mandarin at home. This would then indicate that family dialect dominance extends not only to the L1 but, indeed, to foreign languages being learned as well, including English [40]. This study also reveals that continued use of a dialect into adulthood means learners with less consistent exposure to either Mandarin or English suffer a number of disadvantages relating to the adaptability to the English stress-timed rhythm and intonation patterns, as opposed to the syllable-timed and toned nature typical of many Chinese dialects [41], [42].

The findings of this study are also in strong accordance with Bronfenbrenner's socio-ecological theory, according to which the various interconnected systems influence a person's development, and the family most strongly occupies a central place in the microsystem. According to this theory, the family environment is significant within the context of linguistic and cognitive development as the most direct and initial exposure of a child to language (Meshach, 2024). This study considers family dialect to be a prime input of language, which powerfully influences learners to acquire the pronunciation and intonation of English.

The impact of family dialect on the pronunciation of English reflects the manner in which the microsystem represented by the family conditions phonetic awareness of learners [27]. Theoretically, this therefore leaves the language at work within the family environment as a lay-down "crack" of basic patterns that cannot change after becoming too ingrained in adulthood, especially while learning another language such as English, for which phonological rules make it all the more difficult to conclude. As Bronfenbrenner's theory suggests, the learners are influenced by their immediate surroundings, and in this case, the use of dialect by the family actually reinforces some phonetic patterns which can later be transferred into English pronunciation [43].

The study bases its focus on the socio-ecological theory of Bronfenbrenner in order to shed light on how external environmental factors, more specifically the linguistic environment created by the family, play a role in learners' difficulties in achieving native-like pronunciation in the English accent. It thus focuses attention on issues not merely concerning the individual capabilities of a learner but also on family and community dynamics, which are broader, influencing the outcomes in learning.

This study also points to the necessity of language education policy in China that takes the dialect diversity into account and its role in affecting the pronunciation [44]. Research on first-language interference as posited by Guo [45] indicates similar influences among learners who use a tonal language like Mandarin in terms of pronunciation in English or learning its stress pattern. However, other researchers also add another dimension to this study: besides Mandarin, family dialects play a significant role in affecting phonological skills among learners [21]. This is because past research was largely concerned with the interference that Mandarin posed to English from being the national language. In this regard, this research does much more by drawing attention to the more localized interference, which could, therefore, lead to greater phonetic difficulties for learners in general.

Finally, the results also correlate with other literature sources, such as research from Bolton et al. [46], which found regional variations in English proficiency. It would be evident that dialectal influence goes a very long way in explaining these regional disparities. The problem with the learners from the southwestern regions in China is that they face more problems in the pronunciation of the English language because the dialectal features are strong there [47]. These research findings highlight that a pedagogic method that is tailored according to the unique challenges with which the dialect background learner will challenge and critically overcome seems to be more functional in order to complement the generic methods because some of them inadequately address the phonological challenges of these dialects [48].

5.2. Recommendations

Based on the findings of this research, several concrete pedagogical interventions are recommended for educators, learners, and families to address the challenges posed by family dialects in English language acquisition, particularly in terms of pronunciation and intonation.

First, educators should implement dialect-sensitive pronunciation instruction to accommodate learners from diverse linguistic backgrounds. A diagnostic assessment of dialectal influence should be conducted before formal instruction to identify phonological challenges. Tools such as phonemic awareness tests and intonation pattern analysis can help pinpoint pronunciation difficulties. Teachers should provide explicit phonetic training using contrastive analysis between English phonemes and those of major Chinese dialects, particularly for sounds that are absent in Mandarin or regional dialects, such as /θ/ and /ð/ [49]. Activities like minimal pair drills (e.g., "think" vs. "sink") and articulatory training using International Phonetic Alphabet (IPA) charts and visual pronunciation aids can help students master difficult sounds.

Additionally, rhythm and intonation practice are essential, as Chinese is a syllable-timed language while English follows a stress-timed rhythm. Educators should integrate choral reading exercises, prosody drills, and intonation mapping techniques to enhance students' awareness of English pronunciation patterns [50]. Interactive speaking activities, such as peer correction workshops and AI-powered pronunciation tools (e.g., SpeechAce or Eloquence AI), should also be incorporated to provide instant feedback on pronunciation accuracy. Moreover, a flipped classroom approach can be applied, where learners watch pronunciation-focused videos (e.g., BBC Learning English) before class and engage in discussions or practice sessions during lessons [51].

Second, learners should develop self-regulated pronunciation strategies to improve their spoken English actively. One effective approach is shadowing and imitation techniques, where students mimic native speakers from audiobooks, TED Talks, or English news reports to master intonation and stress patterns [52]. They can also use AI-generated voice models, such as Google's Text-to-Speech, to compare their pronunciation with native speech. Additionally, learners should self-record and maintain pronunciation journals, tracking progress and identifying recurring errors. Language learning apps like Duolingo or YouGlish can provide structured pronunciation feedback [53]. Further, speech recognition-based pronunciation drills on platforms like English Central or FluentU allow learners to practice pronunciation interactively with AI-generated feedback. Participation in language exchange programs, such as university conversation clubs, English corners, or Meetup groups, will also enhance exposure to real-life English pronunciation, helping learners refine their speech in practical settings [54].

Finally, families play a crucial role in shaping early pronunciation habits and should actively support learners at home. Parents can help by ensuring early exposure to native-like pronunciation through English audiobooks, music, and interactive media [55]. Encouraging children to listen to Disney audiobooks, Oxford Reading Tree stories, or engaging English-language podcasts can enhance phonetic awareness. Moreover, parents should create a mini-English immersion environment by introducing "English-only" conversation times at home, watching subtitled English content together, and discussing new vocabulary [56]. To further encourage active pronunciation practice, parents can introduce daily pronunciation challenges, such as repeating tongue twisters, playing phoneme-based word games, or enrolling children in after-school English drama and storytelling programs. Families should also invest in AI-powered pronunciation tools and

language learning applications, which can provide structured feedback on pronunciation and intonation [57].

By implementing these concrete pedagogical interventions, educators, learners, and families can actively mitigate the challenges caused by dialectal influence on English pronunciation. These targeted strategies will enhance phonological awareness, improve pronunciation accuracy, and help learners develop more native-like intonation patterns, ensuring a more effective and confidence-building English learning experience in China.

6. CONCLUSION

This study explored the role of family dialects in the pronunciation and intonation of English learners in China based on Bronfenbrenner's socio-ecological theory. It went deeper to establish how this dialectical impact is deep-seated and influences the kind of native-like pronunciation acquisition students make. Through qualitative analysis, it was established that the long-term use of family dialects contributes to the development of "Chinglish" and pronunciation problems, especially in localities whose dialects are significantly different from Mandarin [58]. On the other hand, the study emphasized that the challenges in these issues are what provide space for parental support and self-directed learning strategies to play a crucial role [59]. In addition, there is an indicated stronger need for more dialect-sensitive teaching practices and raising more awareness about the importance of family environments for the acquisition of English language learners [60].

However, there were several limitations. For instance, the sample size of 10 participants was very small. This limits the generalizability of the findings across the vast and diverse population of English learners in China [61]. The respondents came from different regions with different dialects, which also is a challenge to finding uniform patterns of influence since dialects differ so greatly in their phonological structures. Besides, the present study only relied on the qualitative methodology, although it will contribute to collecting the in-depth perceptions, some experiences may not be well represented as others in the wider spectrum of Chinese learners' experiences [62]. Moreover, one interview transcript was translated from Chinese to English, which could introduce minor differences in the interpretation in comparison to the interviews conducted in English.

Looking ahead, future research could focus on long-term studies on dialect-sensitive pronunciation training to assess its sustained impact on learners' pronunciation development over time. A longitudinal study could track learners from different dialect backgrounds across multiple years, analyzing how consistent exposure to targeted pronunciation interventions influences their phonetic accuracy and intonation patterns. Additionally, a mixed-method approach combining quantitative phonetic analysis (e.g., acoustic measurements of pronunciation accuracy) with qualitative insights (e.g., learners' perceptions and adaptation strategies) could provide a more holistic understanding of the effects of family dialects on English pronunciation. Expanding the research scope to younger learners or individuals at varying proficiency levels would offer valuable insights into how early dialectal exposure shapes pronunciation over time. Future studies should also explore how technology-assisted pronunciation training, such as AI-based speech

recognition tools, can be adapted for dialect-sensitive instruction in Chinese classrooms. These findings would contribute to more effective, evidence-based pedagogical strategies for English language education in China.

Data Availability

The interview data used in this study are not publicly available due to confidentiality agreements with participants. However, anonymized transcripts may be available from the corresponding author upon reasonable request and with appropriate ethical approval.

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Competing Interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of Generative AI and AI-assisted Technologies in the Writing Process

During the preparation of this work, the author used ChatGPT and QuillBot in order to enhance language clarity and grammar. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

Author Contributions

Authors contributed to the paper as follows: theoretical research, concept definition, interview question design, rewriting and revising the manuscript: Shuai Hou, Chunwen Yang; data collection and analysis, designing and writing the manuscript: Shuai Hou, Chunwen Yang, All authors (Shuai Hou, Chunwen Yang) reviewed research results, revised the manuscript and approved the final version of the manuscript.

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