

# FACULTY OF EDUCATION DEPARTMENT OF EDUCATION AND SPECIAL EDUCATION

# THE MOTIVATION OF IMMIGRANT CHILDREN'S HERITAGE LANGUAGE LEARNING

A case study on Chinese immigrant children in Gothenburg, Sweden.

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# **Abstract**

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Keywords: heritage language; children education; motivation

**Aim:** The purpose of this study is to examine children's perceptions of the heritage language learning process in order to gain a better understanding of the heritage language environment in which they live and the motivations for heritage language learning. The goal is to provide theoretical models and empirical evidence to promote children's motivation to learn heritage languages.

**Theory**: The self-determination theory serves as the primary theoretical framework for this study. The Bronfenbrenner's Ecological Systems Theory also lay solid foundation for the investigation of possible influential factors on children's HL learning motivation.

**Methods:** In this paper, the qualitative research approach is adopted. Specifically, data were gathered through interviews on five children who are currently learning their heritage language. The interview questions used to collect information from children were designed to reflect their home language situation, learning attitudes, language-wise choices of information source, identity, social relationships, learning feelings, and future plans.

**Results**: There are three major findings in this research. Regarding children's language environments and language use habits, it was discovered that children's heritage language environments were directly created or deliberately guided by their parents. Additionally, the external language environment and language confidence had visible effects on children's language habits. In terms of motivation, the three most significant components of children's intrinsic motivation were examined, namely source of interest, feelings and emotions, and self-evaluation. While extrinsic motivation was broken down into three categories: reward, pressure and the internalization of instrumental motivation.

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# 1 Introduction

### 1.1 Motivation

Globalization brings with it the international movement and migration of people. According to the International Organization for Migration (IOM), there are roughly 272 million international migrants worldwide in 2019, accounting for 3.5 percent of the global population (World Migration Report, 2020). In the previous 30 years, the worldwide migrant population has almost doubled from 153 million in 1990. The vast majority of these overseas migrants (about 74% of the total) are in their working years (20-64 years old). The number of international kid migrants is thus increasing dramatically as a result of the huge migration of young people.

For this growing population, bilingual children education is important for two major reasons. First of all, immigrant children and their descendants face natural bilingual language environments comprised of a heritage language (HL, the language from their parents. A clear definition will be elaborated in section 1.5) environment at home and a dominant society language environment at school if their HL is not the dominant society language of the current living society. This multi-culture environment makes it necessary for the children to learn at least two languages in everyday family and social life. Secondly, previous research on bilingual children has confirmed the benefits of bilingualism, so an increasing number of parents start regarding bilingualism as an advantage. For example, according to Hopp et al. (2019), bilingual children do better in primary school on lexical and grammatical tasks than monolingual pupils. Additionally, they noted that competency in ethnic language vocabulary can have an effect on early foreign language learning. Blom et al. (2017) evaluated bilingual children from a variety of sociolinguistic contexts and discovered that bilingual children were more adept at detecting the distinct elements of tasks than monolingual children. They further note that this is most likely because multilingual children were exposed to many language environments in their daily lives. As a result, they used to use a variety of indicators to determine the appropriate language to employ in various situations.

The immigrant bilingual youngsters are unique in that one of their languages is largely drawn from their heritage language. HL is frequently identified with its cultural communities. This one-of-a-kind attribute confers some distinct advantages to legacy multilingual speakers. Cho (2000) noted that those who have developed their HL have a number of advantages from a social, personal, and societal standpoint. Moreover, they indicated that those individuals' strong ethnic identity, intimate ties to an ethnic group, and acquaintance with the ethnic group's cultural values, ethics, and manners would benefit their relationships with HL speakers. All of these personal advancements would eventually benefit society. Lam et al. (2020) also suggested that HL learning could assist individuals in developing a strong ethnic

identity, based on the attitudes of heritage learning children, their parents, and teachers among British Sikhs.

The aforementioned benefits demonstrate that investing in HL education for immigrant children is critical and indispensable. However, in the real world, not all immigrant children raised in such natural bilingual situations are bilingual. Many of them can only communicate in the social language but have a limited knowledge of their heritage language. Simultaneously, based on my experience working in a Chinese weekend school in Gothenburg, I discovered that there were always a proportion of students who dropped out for a variety of reasons. Taking the most recent case as an example, one mother (she is from a Chinese immigrant family who lived in Gothenburg for ten years) explained to me that her 11-year-old daughter's desire to speak in Chinese is waning, and she prefers to talk in Swedish to her parents even at home. Driven by this diverging and complex effect of bilingualism on children, this thesis investigates the motivation of immigrant children's heritage language learning.

# 1.2 Objectives and research questions

In light of the critical and complex role of motivation in any language acquisition, during this study, five Chinese immigrant children were interviewed with the purpose of revealing their motivations to learn HL. Prior to the interview, a pre-survey is conducted in a Chinese class in Gothenburg to ascertain students' attitudes toward learning Chinese. The majority of them stated that they registered in the heritage language program due to their parents' requirements. However, a significant number of the students showed strong interest in Mandarin after learning the language for a few months.

Interest is a mental activity that satisfies people's desire for something, providing a motivation to engage in self-indulgence rather than external pressure. From this vantage point, interest has intrinsic motivational features. Children developed intrinsic motivation as they progressed through the Chinese language acquisition process. According to self-determination theory, an individual's intrinsic motivation can be converted to extrinsic motivation via internalization. As a result, the research topic is formulated as what types of extrinsic motivation have been absorbed into the intrinsic motivation of children's HL learning. Additionally, because intrinsic motivation is a critical condition for success as a second language learner (Pae, 2008), it is worthwhile to investigate the intrinsic motivations of children learning Chinese. To have a better understanding of the effect of motivations on children's heritage language development, it is necessary to ascertain their language information, which includes the language environment they are exposed to and their language use habits.

In short, the primary objectives of the present study are to summarize the heritage language situations in which children grow up and to comprehend children's intrinsic and extrinsic motivations for heritage language learning. The results are expected to (i) help identify the crucial scenarios in which children become motivated, (ii) determine whether intrinsic motivation is related to external causes, (iii) assist children in developing interests in heritage language learning. Along this line, the following research questions are structured:

- 1. What is the linguistic environment in which children grow up and how do they use language?
- 2. What internal motivations can be found in those interviewed children?
- 3. What internalized extrinsic motivations can be discovered?

# 1.3 The significance of research

In this area, previous studies are mainly focused on identifying significantly influencing factors that contribute to the promotion of immigrant children's HL. For example, Luo & Wiseman (2000) discovered that Chinese-speaking peers have the greatest beneficial influence on immigrant children's HL maintenance, while English-speaking peers have the greatest detrimental influence. Additionally, children's views regarding HL as a good influencing factor play a role, and mothers' attitudes toward HL maintenance predict children's attitudes toward HL maintenance. Finally, they indicated that immigrant age had visible effects on the persistence of HL. Children who were older when they immigrated were more likely to keep the HL than those who were younger. Nesteruk (2010) also examined the influence of immigrant parents on their children's HL maintenance. Lee and Oxelson (2006) investigated the impacts of teachers' influence on children's HL retention. According to Oriyama (2010), the schooling, community, and broader sociocultural environments all contribute to the development of HL.

Motivation is the "unsung hero" of language learning. Children's motivation is based on their pulse and life in the classroom (Rost, 2006). However, the majority of recent studies concentrated on the externally influencing variables that surround children, such as the surrounding people or society. While some quantitative studies included children as participants, there is a lack of in-depth exploration of children's inner ideas about heritage learning. In other words, the motivation for youngsters to learn about their heritage language is mostly unknown.

My research aims to promote children's heritage language acquisition by gaining a deepened understanding of their motivations. To assist youngsters in developing motivation for heritage language

learning, the circumstances under which their intrinsic motivation occurs are analyzed and summarized. Additionally, as Anjomshoa & Sadighi (2015) stated, a dearth of second language input and interaction is a result of a dearth of surrounding language contexts. To ensure success in legacy language learning, it is also necessary to investigate the learner's language context, which is what this thesis is dedicated to.

### 1.4 Sustainable relevance

My study may contribute to two of the Sustainable Development Goals and Targets outlined in the Global Indicator Framework for the 2030 Agenda for Sustainable Development. The first is Goal 4, which is to ensure inclusive and equitable quality education for all and to encourage opportunities for lifelong learning for everyone. Goal 4.7 is to:

"4.7 By 2030, ensure that all learners have the knowledge and skills necessary to promote sustainable development, including through education for sustainable development and sustainable lifestyles, human rights, gender equality, the promotion of a culture of peace and nonviolence, global citizenship, and an appreciation for cultural diversity and its contribution to sustainable development."

The objective of this research is to ascertain the motivations for immigrant bilingual children's HL learning in order to assist those children in developing their HL, which is a means of encouraging them to interact with associated communities and to respect their associated community culture. Additionally, developing HL is a sound strategy for preserving the world's linguistic and cultural diversity.

The second is concerning aim ten, which is to reduce inequality within and between countries. 10.7 is the following:

"10.7 Promote orderly, secure, regular, and responsible migration and mobility of persons, particularly through the implementation of well-planned and managed migration policies."

My work focuses on immigrant children and the next generation of immigrant households. Knowing why youngsters want to acquire HL enables society or government to provide a more favorable linguistic environment for these immigrants.

# 1.5 Definitions of heritage language (HL) and heritage language learners.

For the convenience of communication, we here formally define the terminology "heritage language". The phrase "legacy language" was firstly used by the Ontario Heritage Languages Programs in Canada (Cummins, 2005). Kagan and Dillon (2008) asserted that widely accepted definitions of heritage speaker and heritage learner have not been established. Meanwhile, various researchers have elucidated the terms "legacy language" and "heritage language learners."

Brinton et al. (2017) defined heritage language as "the language that was acquired first for an individual in terms of acquisition order but has not been entirely acquired due to the switch to another dominant language." Fishman (2001) described heritage language as having "special familial significance for the learners."

In terms of defining heritage language learners, Kagan & Dillon (2008) highlighted the most widely used idea in the United States of America, which was proposed by Valdés (2000). She defined heritage language learners as "individuals raised in homes where a language other than English is spoken and who are fluent in both English and the heritage language to some extent." Additionally, Hornberger & Wang (2017) defined heritage language learners as "individuals who have familial or ancestral ties to a language other than English and who exercise their agency in determining whether they are heritage language learners of that language."

Due to the lack of widely recognized standards for defining heritage language and heritage language learners, my study relied on previously proposed definitions, defining heritage language as the immigrant children's parent's mother tongue. With regards to the specific case, my study's heritage language is Chinese (Mandarin), and I define heritage language learners as children of immigrant households or cross-marriage couples (one of the parents is from another country).

# 2 Background

In comparison to "Multilingual," "Bilingual" has a shorter history and a clearer definition. Lyon (1996) defined bilingualism as the ability to communicate in two languages. Both the societies and individuals could be described as bilingualism.

Regarding the phrase "bilingual children," Garcia (1986) believes that bilingual children should acquire two languages by the age of five in a natural language context. Simultaneously, Garcia (1986) established three more criteria for the characterization of multilingual children. What comes first is that multilingual youngsters should be able to comprehend and communicate in both languages' lexicons. Meanwhile, multilingual youngsters should be exposed to natural language situations, in which both languages are utilized in daily social interactions rather than merely for academic purposes. Additionally, both languages should be acquired concurrently.

In contrast to Garcia (1986), who established parameters for identifying bilingual children, Volterra & Taeschner (1978) distinguish bilingual children based on their linguistic cognitive processes. They split the process of becoming a bilingual child into three stages, claiming that only the child who reaches the last stage is qualified as a bilingual child. The first stage is when the youngster treats both languages as though they were a single systematic lexicon. The second stage is when the youngster recognizes the existence of two distinct systematic lexicons but is unaware that they should be employed in two distinct grammars. The last stage is when the youngster understands how to communicate with someone who speaks a certain language using the same lexicon and syntax.

The subjects of my study are immigrant children who speak two different languages. One is the language of the dominant society; the other is their heritage language. According to the statistics of Immigration 2020 by country of origin, gender, and country of emigration from SCB, the number of immigrants in Sweden continues to grow. Between 2010 and 2019, there were around 91,000 foreign-born individuals in Sweden, a 133% increase over the period 2000–2009. 48.5% originated in Asia, 16.9% in the EU (except for the Nordic nations), and 15.6% in Africa. (SCB, Foreign-born by Country of birth, sex and year of immigration 31 December 2021)

In the light of the immigration statistics, it's understandable that many citizens in Sweden have heritage languages other than Swedish. Municipalities are required by government legislation and policies to provide mother tongue education to immigrant children and cover the fees accordingly. However, education is organized differently in different municipalities. The Language Center in Gothenburg

provides services to schools where immigrant students apply for mother-tongue education. Additionally, there are some Chinese language schools in Gothenburg that were formed by private non-profit groups. When I spoke with the parents of these immigrant children as a heritage language teacher in a Chinese school in Gothenburg, I discovered that the parents were similarly unsure why their children were learning the heritage language. They want their children to study heritage languages, but many discover, reluctantly, that as their children grow older, they lose interest in learning heritage languages and use them less and less in the home.

# 3 Previous research

The literature review focuses on two main aspects. The first aspect is the language context, which explored the existing studies about the influence of language environments based on the findings of the relationships among language input, language output, emotion, and language learning. The second aspect is to introduce the existing research about motivation and heritage language learning. Since motivation is not well-developed in the study of heritage languages, the literature review is centered on previous studies on the relationship between motivation and second language learning. To this end, existing studies are presented in three sections in this chapter. To begin, a definition of motivation and four distinct motivational styles are discussed. It is highlighted that motivation has been demonstrated to be associated with second language acquisition, as well as giving a psychological reason. Second, the three most extensively studied motivating elements associated with second language learning were mentioned: attitude, internal perception, and external pressure. Thirdly, the effect of family and child self-perceptions on heritage language retention is examined. Last but not least, the problems faced by immigrant children in acquiring their heritage language are discussed, as well as adults' motivation to study their heritage language.

# 3.1 Language context

The first part of this section discusses the relationships between language input and acquisition. Specifically, this research examined how children's heritage language environment affects their daily lives. Given the considerable impacts of quantity and quality of language input and language output on language acquisition, we can anticipate that if children have extensive access to heritage language, it will result in a confident and positive attitude toward heritage language learning. Subsequently, the second part concludes the role of emotions on language learning by reviewing recent studies in the field, provided that positive emotion has been proved to have a contribution to language learning.

### 3.1.1 Language input, language output and acquisition

It has been proved that language input influences children's language development positively. Huttenlocher et al. (1991) investigated the connections between parental language input and children's vocabulary development. The findings indicated that the quantity of parental speech had a beneficial effect on children's vocabulary development. In addition to the results resulting from individual differences in ability, they discovered that gender played a significant role in children's vocabulary growth, with girls typically outperforming boys in language performance. Huttenlocher et al. (2002)

also examined the relationship between language input and child syntax in their subsequent research. Their study involved 40 classrooms from 17 different preschools throughout the Greater Chicago area. Each participant was a first-year student. When evaluating the effectiveness of teachers' language input on children's syntax development, the analysis focused on the entire class's performance rather than individual performance. By comparing children's test results at the beginning and end of the school year, they discovered that parents' speech at home aids children in mastering multiple-sentence sentences. Additionally, after a year of preschool where the teacher's speech is complex, the children could speak more complex syntactic sentences in class.

Similarly, the amount of overall language exposure to each language has visible effects on bilingual children's language acquisition. Additionally, Cohen (2016) established the critical role of language exposure in the language development of bilingual children. He invited 38 second-year primary school students who were bilingual in French and English. Assessing children's language abilities with the Peabody Picture Vocabulary Test (Dunn and Dunn 1981). Collecting information about children by having their parents complete questionnaires. Finally, he demonstrated the positive correlations between bilingualism and three distinct types of language exposure. The first is the level of exposure to each language at the moment. The cumulative duration of exposure is the second factor. The final one is the preferred communication language of the child.

Additionally, the acquisition of ethnic languages by bilingual children is related to the volume of ethnic language input. According to Pearson (2007), the quantity of language input is critical, based on his and others' prior research. She asserts that children whose families provide a high level of ethnic language input in everyday life have the greatest impact on their minority language acquisition. He et al. (2020) asserted that the quality and quantity of language input at home and school can be used to forecast children's heritage language growth. They did note, however, that their findings were based on a single year of observation, that they could have been different in a longitudinal study, and that they did not account for the language input characteristics of parents and teachers.

Apart from the quantity of language input, it has been demonstrated that the pattern and frequency of language input also impact bilingual children's language acquisition. On the basis of a survey of 3390 bilingual children, De Houwer (2011) asserted that language input environments influence children's bilingual acquisition. She argues that the most critical factor is the frequency of each language input. In her research, the language input environment consists of the patterns of parental input, the child's age at the time of first hearing the language, and the frequency of each language input. Previously, she demonstrated that the input patterns of both parents speaking the ethnic language at home or of only one

parent speaking the ethnic language at home contribute to the development of children's bilingualism, demonstrating that the "one parent, one language" policy is unnecessary (De Houwer, 2007). De Houwer (2021) later presents the results of four different types of parental input patterns on children's ethnic (non-society-language) speaking. When both parents speak the ethnic language at home and one parent speaks the local language, these families have the best chance of having ethnically linguistic children. Following that, both parents are multilingual in their native and ethnic languages. Families with "one parent-one language" have been overrated to increase the likelihood of cultivating bilingual children. When both parents speak the indigenous language and only one parent speaks an ethnic language, the ethnic language development of children is harmed the least.

Swain's (2005) output hypothesis in second language acquisition showed the importance of language use based on the reality of children in Canadian immersion programs having a lower second language level than their native language. Furthermore, according to the language interaction theory of second language acquisition, language output plays a critical role in the learning process (Block, 2003; Mackey, 2012). Gass & Mackey (2014) found from a review of the literature that language input and output constitute the process of language interaction, allowing learners to receive updated input and feedback. As a result, the students' linguistic skills would increase.

### 3.1.2 Emotion in language learning

Language learning is accompanied by emotions. When observing a language class, it is easy to discern students' emotions through their facial expressions, which keep changing during most classes. For example, Méndez López (2011) use an electronic journal to record the emotions and sources of 20 students enrolled in a 12-week English Language Teaching program in Mexico. The research concluded from an analysis of an electronic journal that the most frequently experienced emotions by students are fear, happiness, worry, calm, sadness, and excitement.

Where do these emotions originate? Méndez López (2011) explained that they originated primarily from five distinct regions. There is a sense of insecurity among students regarding their speaking ability, teachers' attitudes, peer comparisons, the classroom environment, and the type of learning activities. Attitudes toward learning by teachers and classmates were perceived to be related to students' motivation to learn. Pishghadam et al. (2016) demonstrated that different language skills have an effect on learners' emotions, based on the effects of 308 students' emotions on language skill learning. While speaking skills elicited positive feelings in learners, the majority of other skills elicited a mixture of negative emotions.

The relationship between language learning and emotions is bidirectional, meaning that emotions also have impact on language learning. Emotions, as the "primary human motive," act as an amplifier, amplifying the energy intensity of all human behavior (MacIntyre, 2002). It's unsurprising that emotion plays a significant role in language acquisition. Oxford (2015) referred to his previous interviews with successful language learners (Oxford & Cuéllar, 2014) in order to explain the adhibition of emotion in positive psychology on language learning. He noted that positive emotions were more prevalent in learning than negative emotions. He then mentioned the evidence that language anxiety, as a negative emotion, can be beneficial for language learning on occasion. He explained that this is because anxiety, from an existential psychotherapeutic perspective, manifests positively as excitement and anticipation.

Recent research has examined the effects of various emotions on language learning. Méndez López & Peña Aguilar (2013) presented findings from a study on the emotional function of Mexican language learners in southern Mexico. They discovered that both negative and positive emotions have a bidirectional effect on motivations, based on participants' personal narratives, emotional reactions journals, and semi-structured interviews. Positive emotions, on the other hand, tend to increase motivation, while negative emotions tend to decrease motivation. Apart from the common sense, their study demonstrated the negative aspects of positive emotions. For instance, positive emotions caused students to lose themselves in them and abandon their hard work. They also demonstrated the positive aspects of negative emotions, such as increased preparation due to competitive pressure. MacIntyre and Gregersen (2012) emphasized the importance of emotion in motivating individuals due to its powerful effect on the quality of imagined future states. Imagined future states are a necessary component of Dörnyei's 2009 L2 self-system theory.

# 3.2 Motivation and heritage language learning

### 3.2.1 Relevance of motivation in second language learning (L2)

Although the term "motivation" has numerous definitions, the important characteristic of motivation is its role in driving people's learning and processing. According to Dörnyei (1998), motivation in second language learning is more complex due to the unique circumstances in which L2 learners find themselves. Specifically, the first is the L2 culture community's communication coding system; the second is the involved individual's identity in learning activities; and the third, and most essential, is the L2 culture community's social organization function.

In L2, there are primarily four motivational styles: instrumental, integrative, intrinsic, and extrinsic (Brown, 2000; Gardner, 1985; Dörnyei, 1998). The instrumental incentive implies that learners acquire L2 in order to perfect a skill, either as a method of communication or as a competitive advantage in the

future job market. Integrative motivation refers to the desire of language learners to integrate into the L2 social culture through language. Intrinsic and extrinsic motivation refers to two distinct sources of motivation, one driven by internal desire and the other by external pressure.

Motivation has been demonstrated to be associated with students' acquisition of L2 (Lucas, 2010; Guthrie, 1997; Tercanlioglu, 2001; Oroujlou &Vahedi, 2011). Wlosowicz (2013) concluded, based on Signan's (1983) research, that students' motivation was positively associated with their language learning. Al-Otaibi (2004) evaluated the learning efficiency of motivated and uninspired learners and discovered that driven learners acquire language more quickly than unmotivated learners. Additionally, motivated learners wish to devote more time to L2 learning.

However, when it comes to explaining the learner's conduct from a psychological standpoint, due to the abundance of motivation theories, it was difficult to identify the most appropriate theoretical foundation. Dörnyei (1998) has identified two significant psychological theories that can aid in the interpretation of learners' behavior. One is social psychology, which prefers to study human behavior as a whole rather than individual conduct in a social setting. The other is motivational psychology, which is concerned with the explanations for individual behaviors. As a result of the growing body of research on "social cognition," motivational psychology overlaps with social psychology to some extent.

Several psychological theories have been proposed which provide a sound theoretical framework for motivation's influence on L2 learning. Dörnyei (1998) proposed three psychological theories of motivation, i.e., expectancy-value theories, goal theories, and self-determination theories. In conjunction with L2 learning, the expectancy-value theories defined motivation in terms of an individual's expectation of success and the provided value of L2 learning. According to goal theories, L2 learners' motivation is determined by their learning objectives. The theory of self-determination is separated into two components: extrinsic motivation and intrinsic motivation, which will be discussed in detail in the theoretical section. Additionally, Anjomshoa & Sadighi (2015) demonstrated five psychological theories based on the source of motivating demands for L2 learners. They are behavioral views, cognitive views, humanistic views, self-determination, and social cognitive theory.

### 3.2.2 Motivational factors in second language learning

With the premise that motivation has an impact on L2 learning, a number of studies focused on identifying the most influential motivational factors on L2, as well as the underlying mechanisms. Among all motivational factors, three types of motivational factors have been most widely mentioned, namely, attitudes, inner perceptions, and external pressure.

### **Attitudes**

Attitudes play an important role in L2 learning. Good attitudes, particularly toward the L2 community, have been demonstrated to significantly influence L2 learning. A positive attitude serves as an intrinsic motivator. Alizadeh (2016) stressed the long-term impact of intrinsic motivation on second language acquisition. She stated that extrinsically driven L2 learners are less likely to continue in their learning than intrinsically motivated learners, because they miss the delightful feeling associated with L2 learning. Buckledee (2008) similarly emphasized the importance of intrinsic motivation over instrumental (extrinsic) motivation in second language learning, based on survey results from an Italian institution.

As to the attitudes to the L2 community, Lambert (1959) claimed that positive attitudes toward the L2 group and a desire to integrate are key components of the learning motivation. Language, as a carrier of culture, is frequently associated with a unique national cultural background. Positivity toward the L2 community can facilitate learners' L2 learning and deepen their grasp of the culture that underpins the language. Simultaneously, it can drive learners to engage in active contact with members of the L2 community, and via frequent practice with native speakers, learners' L2 ability will swiftly increase.

### Inner perceptions

Inner perceptions are how the learner views L2 learning. According to Wesely (2012), inner perceptions are typically divided into two components: perceptions of the learners and perceptions of the learning situation. The learners' perceptions are about their understanding of themselves and their language learning. It can be defined as, first and foremost, how the learners approach L2 learning, i.e., as an active or passive learner. Csizér & Illés (2020) discovered that engaging students in their own way in the classroom and providing opportunities for self-presentation and self-creation can boost students' motivation for language acquisition. Second, how they perceive L2 learning, i.e., the value they see in mastering the language, could be explained by the expectancy-value theory.

Perceptions of the learning scenario refer to an individual's impression of the learning environment, for example, how they feel about the method and style of instruction provided by the teacher in class. It is natural that a negative view of the learning circumstance would have an effect on learners' learning attitudes, which would subsequently have an effect on their L2 learning. Zulkefly & Razali (2019) observed and interviewed four students in a rural secondary school in Malaysia, and their findings indicated that lectures that the unsuitable lessons for the learners' proficiency levels and interests would reduce learners' enthusiasm to learn. According to Wu (2003), a familiar learning environment, realistic

tasks, and appropriate instruction could all contribute to learners' motivation. Ebata (2008) emphasized the importance of harmonious classroom social relationships, particularly pleasant teacher-student relationships and friendly peer relationships, for increasing learners' L2 motivation.

### External pressures

It is common for L2 learners, particularly younger learners, to face external pressures. For these younger learners, the majority of external forces come from their parents. Parents' opinions toward their children's second language learning have a significant impact on their children's second language learning performance. Gardner (1968) identified two distinct roles the parents played in their children's language learning situations. One was an active role, while the other was a passive one. Parents who take an active role in their children's language learning will encourage them to acquire L2 and will provide helpful more actively during the L2 learning of their children, such as monitoring homework and delivering suitable rewards. With such positive feedbacks, the children's L2 acquisition naturally improved. Parents who take a passive role do not necessarily oppose their children studying L2, but rather subconsciously express negative opinions regarding the L2 learning to their children. As a result, the child's motivation to learn L2 is diminished. Existing research also implies that the many roles that parents play are tied to their socioeconomic position. However, this is out of the scope of the current research. Interested readers are suggested to refer to the study of Butler (2015).

### 3.2.3 Family, identity, and HL learning

Family plays a vital role in providing the linguistic environment of children (Schalley & Eisenchlas, 2020). Obviously, it is the initial language context in which a kid develops his or her heritage language (HL). Additionally, the parents' continuous influence on the language development of their child is also critical. Melo-Pfeifer (2015) investigated the role of parents and relatives in their children's HL use and learning using data from the "Images of Portuguese (learning) abroad" project. By using semiotic analysis to children's drawings, she demonstrated that family members, particularly parents and siblings, had an emotional role in the construction of children's identities and tradition transmission, and are also associated with children's cognitive and verbal development. The additional two responsibilities that relatives played in addition to those of parents were social and acquisitional, as a result of expanded communication and HL use.

Given the significant influence that parents have on their children's HL learning, parents' motivation for their children to learn HL has also been researched. Van Mensel and Deconinck (2019) analyzed interview data regarding the parenting experiences of parents from diverse language and socioeconomic origins in DME in Brussels. Connecting the interview findings to established theories, he concluded that

parents of young HL learners frequently discussed the difficulties they faced as a result of monolingualism and the benefits of having the freedom to select their identities as a result of multilingual schooling. Additionally, they frequently expressed optimism for their children's future accomplishments. Nesteruk (2010) noted that Eastern European parents' positive opinions toward children's HL learning were motivated by the need to communicate with grandparents and relatives, as well as a desire for their children's intellectual development.

Parents' supportive attitudes regarding HL maintenance would have an effect on their children's social network and ethnocultural identity. Nesteruk (2010) discovered that parents who have a positive attitude toward their children's HL learning would wish to assist them in contacting more HL speaking surroundings and bringing them into contact with the ethnic community. According to Hulsen et al., (2002), the amount of social interactions with HL speakers was positively connected with the immigrants' ability to maintain their HL. Additionally, parents' positive attitudes toward HL maintenance would be reflected in their daily actions. Both attitudes and actions influenced children's positive attitudes regarding HL upkeep and ethnic community, ultimately resulting in the development of a good ethnic cultural identity (Lee, 2013).

In HL maintenance, the relationship between language and identity is interactive. In the field of heritage language education, the perception of ethnic identity expressed in the heritage language is widely recognized (Francis et al., 2009). For instance, Phinney et al. (2001) established that language, as a critical indicator of ethnic identification, has a sizable effect on teenage ethnic identity. He (2006) hypothesized that one of the reasons HL students enrolled in language programs was to assert their ethnic identity. Additionally, Korean parents believe that speaking Korean will aid in the development of their children's ethnic identity (Lee, 2013).

As a result, ethnic identity benefits both parents and children in terms of HL maintenance. For parents, ethnic identification serves as a motivator to maintain their children's ethnic identity through heritage language acquisition. According to Li (1999), parents' positive ethnic identities would encourage their children to continue utilizing HL when confronted with prejudice. For youngsters, a good ethnic identification fosters a desire to acquire a legacy language, which ultimately aids in HL learning. Carreira & Kagan (2011) report that the most frequently expressed reason for enrolling in HL courses was "to learn their cultural and linguistic roots." Beaudrie et al. (2009) established that proficiency in a heritage language was not an essential condition for HL identity. Their study enrolled students enrolled in Spanish HL studies at a Southwestern institution. One participant admitted that the program helped

him/her recognize his/her Mexican-American identity, despite the fact that he/she was still struggling with Spanish.

### 3.2.4 Obstacles and motivations for immigrants' HL learning

When reviewing the previous research on heritage language learning and learner motivation, it became clear that the available study did not adequately address the barriers experienced by immigrants in learning their heritage languages. The literature with students and parents as research subjects addressed the issues of a lack of motivation for HL learning, the penetration of the dominant society language, and the absence of a social language environment. O'Rourke and Zhou (2018) surveyed high school students' perceptions about language learning in summer language learning programs (concluding heritage language learners and second language learners). Their sentiments were assessed using an ordinal scale and questionnaires regarding course evaluation and attitudes toward language learning. According to O'Rourke and Zhou (2018), heritage language learners were less motivated to study a language than second language learners. According to Nesteruk (2010), parents of immigrant children in the United States of America believed that their children's daily discussions were dominated by English and that their children missed opportunities to practice HL due to the absence of social ethnic language environments.

The literature with educators as topics studied the problems experienced by HL learners and the difficulties associated with teaching HL to children. Russell and Kuriscak (2015) conducted an online survey to ascertain the attitudes, pedagogical practices, and hypothetical scenarios associated with teaching Spanish as a heritage language among preservice (teacher candidates) and in-service (current) Spanish teachers in the United States of America. Three major impediments have been identified in their research. The first category was linguistic issues, which included difficulty with language understanding, such as grammar, spelling, and literacy. The second category included social and identity issues, such as high expectations from teachers and parents, and teachers' willingness to differentiate between native and second language learners. The final category included curriculum-related issues. For instance, there are no established techniques or standards for assessing students' HL proficiency, and teachers are underprepared to teach HL learners. Purkarthofer & De Korne (2020) conducted an analysis of children's artwork depicting the language used in various social spaces. To assist children in developing language-using habits and to boost the use of minority languages, their educators established zones of language usage, in which different languages are utilized in separate locations. In practice, however, children's paintings demonstrated that their language use was fluid and there was no strict zoning of language.

Previous research has examined the factors that influence immigrant children's heritage language acquisition. Two quantitative studies have been frequently acknowledged on the subject of Chinese as a heritage language. One is Wen's (1997) report on the motivational elements of university students with Asian or Asian-American ancestry who were studying Chinese in the United States of America via a survey method. She concluded that intrinsic motivation, such as curiosity in Chinese culture, played a significant role during the initial stage. While students' desire for learning activities and procedures gradually supplanted intrinsic motivations and became the primary motivators at the middle stage of Chinese learning, The other is Luo & Wiseman's (2000) questionnaire-based investigation of the family and peer factors on the heritage language maintenance of immigrant Chinese American children. They hypothesized that four elements affect children's HL maintenance: parents' attitudes toward Chinese, children's relationship with their parents, children's contact with their grandparents, and peer impact. The findings indicated that peer influence was the primary element affecting children's retention of their heritage language. It should be noted explicitly that peers who spoke Chinese had a stronger influence than peers who spoke English.

# 4 Theoretical framework

This chapter introduces the theoretical foundations governing the heritage language of immigrant children. Two kinds of theories have been chosen as the solid foundation for the understanding of learning process and are used to guide the current research.

# 4.1 Self-determination theory

Chapter 3 introduced four distinct motivational styles, i.e., instrumental, integrative, intrinsic, and extrinsic motivations. My research demonstrates the critical role of self-motivation in high-level learning. Although the research subjects in this thesis are children, it can be reasonably presumed that children have developed their own ways of understanding, interpreting, and communicating with the world, which certainly includes language learning. To this end, self-determination theory is selected as the theoretical foundation for this research. Self-determination can to some extent be interpreted as an empirical choice in a sense that individuals choose their actions only based on a thorough understanding of their own needs and the surrounding environment. Not only does self-determination theory emphasize the importance of intrinsic motivation, but it also proposes that extrinsic motivation can occasionally become intrinsic motivation as a result of internalization.

Deci and Ryan (2000) proposed the self-determination theory, which states that the natural state of human beings is such that a continuous positive and persistent belief recurs in an attempt to achieve self-commitment, also known as the "inner growth trend," and that human beings have an innate psychological need for self-motivation and personality integration. They outlined three innate needs that, if met, will result in the individual's optimal development and progress. We human beings attempt to fulfill the following three needs through personal experience; if we succeed, we will have a psychological sense of accomplishment (satisfaction) and thus good performance; if we fail, we will have a fragmented ego. Competence, relatedness, and autonomy are the three needs. Competence is a term that refers to our desire to exert control over our environment. Relatedness is the desire to feel connected to others. Our desire for autonomy stems from our desire to freely integrate experience with a sense of self.

According to self-determination theory, meeting basic psychological needs results in intrinsic motivation, which refers to the intrinsic value or pleasure associated with an activity rather than the goal toward which the activity is directed (Staw, 1976). Thus, individuals engage in intrinsically motivated behavior out of their own volition, rather than to earn a reward or avoid punishment. Extrinsic motivation, on the other hand, is directed toward the external goal of the activity. Deci et al. (1999) conducted a

meta-analysis of 128 experimental studies on the effects of extrinsic motivation on intrinsic motivation. They concluded that rewards, both tangible and expected, for successfully completing a behavior significantly reduced participants' intrinsic motivation. While positive reinforcement may boost participants' self-reported interests. According to Vallerand Reid (1984), positive feedback is a technique that can increase a person's sense of competence under certain circumstances, thereby generating intrinsic motivation for the activity.

According to self-determination theory, when extrinsic motivation is internalized or integrated into a person's sense of self, extrinsic-motivated behaviors become intrinsically motivated (Deci & Ryan, 2000). Internalized motivation occurs on multiple levels. The first stage is amotivation, which refers to individuals whose behavior is determined by their environment rather than by themselves. Between his behaviors and motivation, there is a lack of regulation. Extrinsic motivation is the second stage. It explains how people transition from extrinsic to intrinsic motivation. To begin, individuals perceived external rewards or pressure (external regulation). Then the newly imposed regulation began. External regulation is analogous. In the stage, behavior is still motivated by rewards and punishments. However, introjected regulation encompasses contingent situations that the individual controls; additionally, individuals begin to consider the benefits of such behavior and develop an emotional attachment to the concept (identified regulation). Finally, the transformation is complete, and human motivation becomes a form of integrated regulation. The third stage of the internalized motivation process is intrinsic motivation, which refers to the desire to complete behavior for the sake of the activity's intrinsic satisfaction.

Self-determination theory is based on empirical research of both quasi-experiments and natural experiments to better understand the psychological and social aspects that cater to human needs (Ryan & Deci, 2017). Ryan & Deci (2017) developed six mini-theories of self-determination theory, the first of which is the cognitive evaluation theory, which focuses on the theoretical explanation of intrinsic motivation. Second, internalization of various extrinsic motives was stressed in the organismic integration theory. Then, from the perspectives of individual differences and their various motivations (intrinsic or extrinsic), the causality orientations theory and goal contents theory separate the various levels of social-contextual influence on the subjects and their level of well-being. Last but not least, the basic psychological needs theory and the relationships motivation theory explained why humans' three basic needs (autonomy, competence, and relatedness) are so important, and how these needs are met by people who choose to be in intimate relationships.

My research examines children's motivation to learn their heritage language. By conducting interviews with children, we can ascertain their perceptions of heritage language learning and thus analyze their motivations for HL learning. Using self-determination theory as the backbone of theoretical analysis, this study will examine children's motivation in terms of intrinsic and extrinsic motivation. The intrinsic motivation of children will be determined by the factors that satisfy their three basic needs, and the extrinsic motivation of children will be determined by the extrinsic factors that have been internalized into children's senses.

# 4.2 Bronfenbrenner's Ecological Systems Theory

The Ecological Systems theory of Bronfenbrenner is used to provide theoretical support for the investigation of children's daily language environment. Bronfenbrenner's Ecological Systems theory exemplified the factors that influence children's surrounding environments and their development, and further affect the children's motivation of HL learning. My study utilized the microsystem component, which is the most intimately connected factor with children, in order to ascertain the type of language environment to which children are exposed and to ascertain the factors that contribute to the formation of the language environment.

Bronfenbrenner believes that children's development will be affected by the surrounding the environment (Ryan,2001; Bronfenbrenner,1974), for instance, a family, a school, a peer group, a neighborhood, a social service, the media, and culture, and the list goes on. He classified children's environments into five distinct systems. Bronfenbrenner classifies them as follows: (i) Microsystem, (ii) Mesosystem, (iii) Exosystem, (iv) Macrosystem, and (v) Chronosystem. Additionally, each system's influence on the child is correlated with the influence of the others. The relationships between children and the microsystem's components have also interacted. The microsystem encompasses all of the elements that have a direct impact on children's daily lives. For example, family, school, and peers. Other systems incorporated a broader range of environmental factors. Each system is contained within the one next to it from (i) to (v) (see figure 1).

As said in section 3, the existing research on the elements that influence children's second language motivation is primarily focused on the family or school, which typically reflect the microsystem's influencing components. As a result, it's critical to look at the language contexts in which youngsters interact on a regular basis. The exploration will focus on the aspects of Bronfenbrenner's ecological systems theory that pertain to children, particularly the microsystems theory part. Specifically, this

research focus on family language policies, language exposure on social media, the language environment at school, and the language they use when communicating with relatives and friends.

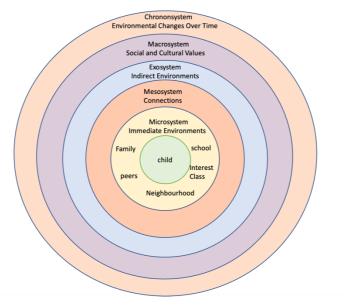


Figure 1 Bronfenbrenner's Ecological Systems Theory

# 5 Methodology

This chapter discusses the data collection methodology used in the present study. It includes key methods and instructions applied during interviews with the selected interviewees (bilingual children). Sample selection, study design, data analysis techniques, and ethical considerations are also elaborated.

### 5.1 The theoretical guideline for interview

Due to the unique psychological characteristics of children that differentiate them from adults, researchers frequently run into difficulties when conducting interviews with children subjects. Kyronlampi-Kylmanen & Maatta (2011), for example, concluded two difficulties they encountered during their interview with Finnish daycare children. The first one is children's interpretation of the designed questions. They discovered that some of the interview questions, especially those about the outside world (such as parents' jobs), were inappropriate for children because children interpreted the world differently. The other difficulty was keeping up with the thoughts of children. Children's stories were frequently overburdened with trivial descriptions, making it difficult to obtain the critical information we require.

Several useful tips can be summarized from existing studies, which should be followed in order to conduct a successful interview with children. Most notably, two aspects of the preparation stage could be improved. Ponizovsky-Bergelson et al. (2019) compared seven interviewer categories with a variety of interviewers' questions and expressions for question design, including closed-ended questions; question requests; open-ended questions; sequence of utterances; request; encouragement, and silence. They suggested that open-ended questions might elicit more information from children than closed-ended questions do. For the purpose of establishing familiar contexts, a familiar interview setting may assist both the interviewer and the children in relaxing and obtaining additional data during the interview (Danby et al., 2011). One or two prior informal visits to the children's field could serve as the detailed behavior guideline (Christensen, 2004).

Kyronlampi-Kylmanen & Maatta (2011) insisted on an equal relationship between children and interviewer (adult) during the interviewing stage. The democratic dialogue requires children and the interviewer (adult) to speak in turn. Children's eagerness to discuss significant experiences precludes them from using the adult-centered interview method. Children should be viewed as capable of creating their own social worlds (Danby, 2011; Chritensen& James, 2000; Danby, 2002). Additionally, the interviewer should provide extra supports to the interviewees, such as praise and approval (Ponizovsky-

Bergelson et al., 2019). Children who are confident are more willing to share information, allowing researchers to collect more data. A final point to consider is the instrumentation used during the recording process. For face-to-face interviews, videotaped recordings are preferable to audio recordings because the researcher can observe the children's body language.

In this research, the aforementioned advices are followed during the and interview and data collection phase. The suggestion proposed by Ponizovsky-Bergelson et al., (2019) to create a familiar environment during the interview preparation phase did not present a problem, as the participants were all from the class the author teaches. The author and the students meet every Saturday for a continuous period of 9 months and thus are familiar with each other. Additionally, open-ended questions were also designed and used during the interview in order to give the children more opportunities to speak and allow for the collection of more useful information.

Albeit with a comprehensive and theory-guided preparation, the author still encountered several difficulties during the interview. For instance, as an introduction to the interview, a photograph of children learning Chinese at another school (a photo from the internet) is prepared in order to inspire the interviewees to reflect on his or her own Chinese learning experience. The initial thought was to observe the various expressions of each child in the photograph and then ask the interviewees to imagine how he or she would appear if they were in this photograph. However, the interviewees' focus is different from what was anticipated. They were more attracted to deciphering the meanings of the Chinese characters on the word cards held by the children in these images. As a result, it was different to adhere to the expected interview pattern.

When transcoding the audio recordings, it is discovered that despite the author's best efforts, the adultoriented interview model was unintentionally adopted in several dialogues. For instance, when the interviewee mentioned a school staff who spoke Chinese with him, the author should have attempted to elicit additional information from the child by following up their dialogue. However, the author interrupted the child and continue to ask another planned question "Could you tell a bit about your best friend?".

# 5.2 Sample

Five Chinese immigrant children in Gothenburg, Sweden, participated in this study. These five children were not chosen at random, but to fulfill the objectives of this research. To begin, the study is about heritage languages, and naturally take "Chinese" as an example, since the author is Chinese and teaching

Chinese immigrant children. Second, since the study is examining immigrant children's motivation to learn their heritage language, participants should already be proficient in Chinese. Third, they should be from the same Chinese learning class to eliminate the influence of external factors such as schools, teachers, and age. As mentioned above, Chinese language classes in Gothenburg are offered in two formats. One type of education is provided by a language center; the other type is provided by private non-profit Chinese language schools. Participants are chosen from the private non-profit school to best use the available resources of the author (the author is a part-time teaching in the school). Last but not least, in accordance with the interview guide for children's participants, the final participants in the study were selected from students in the first grade, which the author teaches.

All children in Grade one are of partial Chinese ancestry. The class consists of ten girls and eleven boys. Nineteen of them are from immigrant families in which both the father and mother were or are Chinese nationals. Only two of them are from cross-national marriage families, and both have Chinese mothers.

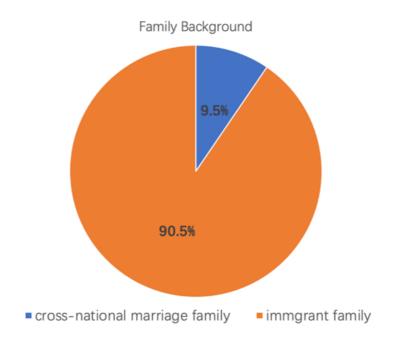


Table 1 Family background of children in Grade One

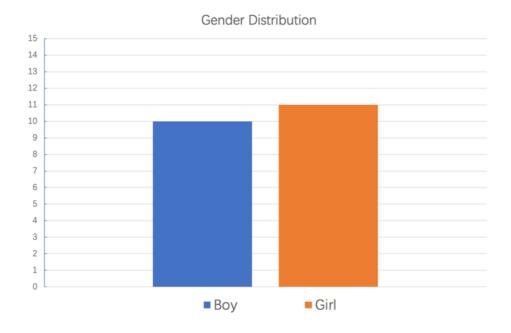


Table 2 Gender distribution of children in Grade One

To avoid the study's results being influenced by gender homogeneity, the participants are selected to include two boys and three girls in order to generally achieve gender equality. For reasons of privacy, the five participants' names have been replaced with pseudonyms in this paper. The following is a summary of their basic information:

Name	Age	Gender	Parents' original nationality	Born	Remark
Lily	8	Girl	Mom: Chinese	Born in China	
Lily			Dad: Chinese	Moved to Sweden at 1.5-year-old	
Mia	7 Girl	Mom: Chinese	Born in Sweden	All five children	
IVIIa		GIII	Dad: Swede	Born in Sweden	have good Chinese listening and speaking skills and are able to communicate in Chinese with the interviewer.
Zoe	7	7 Girl	Mom: Chinese	Born in Sweden	
2.00			Dad: Chinese		
D1 '1	0	8 Boy	Mom: Chinese	Born in Sweden	
Phil	8		Dad: Chinese		
Rory	8 Boy	Mom: Chinese	Born in Sweden		
Roly		БОУ	Dad: Chinese	Dom in Sweden	

Table 3 Children's background

All the two boys (Phil and Rory) and three girls (Lily, Mia, and Zoe) have good Chinese listening and speaking skills and are able to communicate in Chinese during the interview process. Except for Lily who was born in China, the rest were born in Sweden. While the father of the girl Mia is a Swede, the parents of the other four children are all Chinese.

# 5.3 Past education of the participants' Chinese learning

As introduced above, the participants of my study were from a Chinese school which is located in the central part of Gothenburg. The school offers Chinese education for ten grades, i.e., from grade zero to grade nine, copying the most widely used education framework in mainland China. Every Saturday afternoon, Chinese language classes are held and last for two hours. According to the course outline, the objective of the Grade zero curriculum is to assist students in mastering Pinyin (including 23 initials and 24 rhymes). In grade one, the goal of the first semester is to master the fundamental and most frequently used Chinese characters. The second semester's curriculum focuses on the acquisition of new Chinese characters in addition to the phrases.

All of the selected participants were in the second semester of grade one. That means they have already spent one and a half years studying Chinese. Due to the epidemic, Chinese classes were conducted online via Zoom during the first semester of grade zero and grade one. After the restrictions were released, all students return to the campus in February. Based on the school's statistics, five students have chosen to quit the Chinese school during the last year for a variety of reasons.

# 5.4 Data collection and transcription

The data was collected during an interview with each of the five children. Prior to the official interview, some preparatory work was also conducted. As the first step, the author sent invitation letters to six selected children's parents, requesting their approval and noting in the letters that children have the same right as their parents to decline participation. Although the parents of one girl expressed strong support, the girl herself declined to participate due to her shyness. Ultimately, five children took part in the interview. The interview questions were designed in two sections. One is the intrinsic motivational component, which includes the acquisition of attitudes toward Chinese, the acquisition of feelings, and the acquisition of identities. The section part focuses on extrinsic motivations, which include the home language environment, social network, media, praise, and future plans.

In terms of the interview method, the initial plan is to collect data through group interviews. Due to the inability to coordinate the schedules of two students, the final interview consisted of a group interview

with three students and individual interviews with each of the remaining two students. Therefore, the interviews were conducted on three different days with two weeks. All three interviews were conducted in the heritage language (Chinese), since that is the only language all participants and the interviewer are fluent with. Additionally, all three interviews were conducted at the Chinese school to ensure the children's comfort in a familiar environment.

For each of the three interviews, I used a different introduction tailored for the participants based on my impressions of the children's personalities. The first interview is with the girl Lily. I began with a photograph of a Chinese class with each child holding a word card to remind her of her experience learning Chinese. However, she was drawn to the characters, and things deviated from the planned schedule. In light of this failure, I began my second group interview with Mia, Zoe, and Phil by asking, "How do you feel when you come to the Chinese school?" Phil expressed happiness at the prospect of playing football with his friends after school. The other two girls remained silent. The first question's lack of success drives me to change again the opening question in the third interview with Rory. When I interviewed Rory, the first question was to ascertain whether he had encountered Chinese-speaking children at his Swedish school and to encourage him to think why he is studying Chinese.

The conducted interview adopted the audio-recorded approach. Even though Ponizovsky-Bergelson et al. (2019) suggested that it is better to use the video-recorded way since it could observe children's body gestures when the researcher conducts the transcription. However, the parents were worried about the privacy problems, and the children would also be anxious about the video recording. In order not to miss the children's body language, I take notes if I observe any specific body language of the children during the interview.

Interviews should be coded as soon as possible to avoid overlooking details. Within a week of completing the interviews, I transcribed and edited the transcripts. While I was transcribing, my mind was recalling the interview situation and I could add details with writing if I recalled some specific emotions expressed by the interviewees.

There was no response to the question of what constitutes a valid transcription. However, if the question was about a useful transcription for research purposes, the answer should be a verbatim description, as it may imply a person's psychological interpretations. That is, whether the transcription should be verbatim and word for word or transformed into a formal written style is determined by the transcript's intended use (Kvale, 2012). Because the purpose of my study was to examine children's motivation for

HL learning through their expressions during interviews, the motivation was a type of mental activity. I chose to transcribe word for word to avoid missing any details.

### 5.5 Ethical considerations

The participants of the research are children. Except for obtaining parents' consent, Hammersley and Traianou (2012) proposed that when research refers to children, children should have the same rights as adults to choose to participate or not. According to Babbie (2015); Patton (2002); and Hammersley and Traianou (2012), the most widely recognized ethical principles for conducting research are as follows:

- (i) Avoid causing harm. Assessing and mitigating potential risks associated with research.
   Additionally, participants should be informed in advance of these potential risks.
- (ii) There is no deception or autonomy. Educating participants about the purpose and methods of the research prior to experiments or surveys. Each participant should be self-selected.
- (iii) Protection of personal information and data security. Any information that may reveal personal information, such as names or specific personal characteristics, should not be included in the research results. All information collected will be used solely for research purposes.
- (iv) Reciprocity. If possible, it is prudent and reasonable to compensate participants. Principles of politics. All research should adhere to legal standards and treat everyone equally.

The above principles were strictly followed during the preparation and conduction of the interview.

Two additional ethical issues must also be considered in the proposed research in accordance with the aforementioned ethical principles. One is that the children who participate in the proposed research should be treated with the same dignity and respect as their parents. When I sent invitation letters to the children's parents, I stressed that participation is voluntary and requires both the parents' and children's approval. I will begin my interview only after both parties have confirmed their agreement.

The other concern is with the recording. The interviews for this study must be recorded. The recording and data should be handled with care and in accordance with the five ethical principles listed above. These recordings will be used solely for research purposes in connection with my master's thesis. Additionally, all participants used pseudonyms in the transcoding and presentation of the results.

# 6 Results

This section answers the study's research questions by analyzing the data collected and combining it with existing theories and literature. Each of the three subsections corresponds to one of the study's three research questions. Because the interviewees communicated in Chinese, the data were transcribed in Chinese. The questions and answers will be translated from Chinese to English in results.

# 6.1 HL environment and language using habits

Children would be affected by their surrounded environments. Parents, as the closest adult to their children, have a significant influence on them in terms of heritage language learning. The interviews with five children revealed that the primary location where they are exposed to Chinese is at home, where their parents have purposefully created a home heritage language environment. Four children stated that their parents speak a different language with one another, such as English or dialects, but with them in Chinese (Mandarin).

Other opportunities for their children to be exposed to Chinese in social situations are also largely created by their parents. Specifically, their parents all maintain close contact with the Chinese community in Gothenburg and encourage their children to make friends with their Chinese-speaking peers. Lily stated that she frequently attends Chinese immigrant children's birthday parties in order to make new friends. Lily's ballet and Rory's taekwondo classes were founded by Chinese, and the majority of students are Chinese immigrant children. Then, parents enroll their children in a Chinese school to learn the language. They all mentioned that they initially came to Chinese school on their parents' advice. Finally, parents take their children to China and provide them with Chinese literature. Each of the five children described their visit to China and expressed a favorable opinion of the country. Additionally, they all stated that they own Chinese books.

In terms of heritage language usage habits, the majority of children speak Chinese at home and Swedish at school. However, when they communicate with their elder sister, they have varying degrees of tendency to use Swedish, the frequency of which is related to their comfort level with Chinese. Lily, Mia, Phil, and Rory are all from immigrant families and spend the majority of their time speaking Chinese with their parents. Zoe comes from a cross-marriage family and speaks Swedish with her father, who is also a Swede. However, because she lives alone with her mother due to her father's job, she also speaks a lot of Chinese at home. Additionally, Rory mentioned that he frequently communicates with his elder sister in Swedish due to his proficiency in the language. Lily stated that she used to converse

with her elder sister in Swedish for fun, but she would receive a reprimand. She now prefers to communicate in Chinese because Swedish is more difficult to learn than Chinese.

Based on the efforts made by parents to provide a more heritage language-rich environment for their children, it can be concluded that parents are motivated to foster heritage language development in their children. It's worth noting that, despite the fact that the majority of their parents do not speak Swedish, all five children attend a Swedish school where the primary language of instruction is Swedish, rather than an international school where English is the primary language of instruction. This phenomenon reflects parents' desire for their children to improve their Swedish in order to integrate more effectively into the local community.

# 6.2 Children's intrinsic motivation in HL learning

According to the self-determination theory, intrinsic motivation arises from the three basic psychological needs of the individual to satisfy his or her ego, namely competence, belonging, and autonomy. During the interview with these participants, apart from the requirement of their parents, all five children mentioned that they attend the Chinese school for personal reasons. The portion of these reasons pertaining to intrinsic motivation will be discussed below.

### 6.2.1 Children's source of interest in HL learning

The interview results exhibited children's different source of interest on the pre- and post-learning process in heritage languages. Prior to children engaging in Chinese language learning, my research discovered that parental behaviors could foster children's interest in the language. For instance, Rory's interest in Chinese language learning stems from a bedtime story he heard as a small child. At bedtime, his mother reads him Chinese stories, and the variety of interesting short stories is appealing to him. When he realized that if he could learn Chinese, he could read the stories independently, he asked his mother to help him learn the language and that is when his Chinese learning journey began.

Throughout the process of Chinese learning, children's curiosity about Chinese knowledge and positive attitudes toward Chinese or China would aid them in continuing their HL education. For those who are curious about knowledge itself, Lily says she looks forward to learning new characters and texts before each class when asked why she continues to attend the Chinese school. They expressed positive feelings toward China and the Chinese when they were asked to describe their travel experience in China.

I have been to China. There are many yummy foods. China is beautiful. I want to go to China for a hundred times! (Mia)

I want to go back to China, because there are many delicious food and fun places. China is huge. Chinese is smart, hmmm, my mom said, the child of my elder sister's is smart. (Phil)

I have been to China for three times, and I still want to go. There are many amusement parks in China, there will be a lot of fun. (Zoe)

I have been to China for two times /.../ China is great. (Rory)

When they discussed people or events related to China, they tended to express positive feelings and describe them with laudatory language.

In China, my grandmother, I have a little sister there who is very cute. Next time I come back to China, I can speak Chinese with my grandparents, and sisters. (Zoe)

I have many relatives in China. Besides, I have an elder sister in China. She is smart, and she gave me a chocolate when I was a little child. (Phil)

hmmm, I want to write Chinese as well as my mom. (Mia)

I want to go to China for seeing my grandparents. I love them. (Rory)

Positive feelings toward China will fuel their desire to learn the language in order to gain a better understanding of the culture of their chosen country.

### 6.2.2 Children's feelings and emotions during HL learning

During the process of HL learning, the children interviewed in my study expressed both positive and negative emotions and feelings. Positive feelings and emotions frequently occurred when they discussed knowledge that they believed they had already grasped. For instance, when asked about their feelings toward Pinyin characters, which were introduced in grade zero, they expressed confidence in their ability to read and write them correctly.

Chinese is interesting. The part of Pinyin and writing are interesting. (Mia)

Pinyin is so easy for me. (Phil)

Besides, when we discussed Chinese idioms or the Chinese stories during the interview with Rory, he couldn't wait to show me the idioms he knew and recited a few lines from the characters in the books he was reading.

They also frequently experience negative emotions when confronted with knowledge that they believe they are not yet proficient in and will take some time to master. Additionally, the quantity of homework will contribute to a negative mood. For instance, Lily stated that she will be irritated if she is unable to write the Pinyin of Chinese characters. Zoe mentioned how difficult it is to write Chinese characters. Phil was bothered by an excessive amount of Chinese homework as a result of his attendance at two Chinese classes.

Sometimes I don't know the Pinyin of some Chinese characters. It made me annoyed. (Lily)

It is difficult to write Chinese characters. My little sister is too noisy when I am writing Chinese. (Zoe)

Sometimes the homework is too much. Because I also attend the mother tongue classes. (Phil)

### 6.2.3 Children's self-evaluations about their HL proficiency

The children's self-evaluations about their two language levels during the interviews to some extent related to their language using habits and their motivations to practice HL. Children who prefer to communicate in Swedish believe that they have a higher level of Swedish. Observing the children's language use during the interview, it was discovered that three children subconsciously used Swedish rather than Chinese when confronted with unfamiliar words, indicating that they were more familiar with Swedish than Chinese. Then they were asked to report their self-evaluation about their Chinese and Swedish proficiency. Among the three children, two stated that they thought their Swedish was superior to their Chinese and preferred to communicate in Swedish.

On the other hand, children with a higher level of self-evaluation about their Chinese language proficiency are more likely to communicate in Chinese. For instance, Lily believes her Chinese proficiency is superior to her Swedish proficiency, and she frequently prefers to communicate in Chinese. As a result, her Chinese proficiency continues to improve. However, because Chinese is not the

dominant language in Swedish society, children who are more proficient in the language may encounter embarrassment as a result of their increased proficiency. Phil, for example, speaks Chinese fluently and prefers to communicate in the language. He did mention, however, that when he accidentally said Chinese words in Swedish school, he felt embarrassed.

I prefer to speak Chinese than Swedish. Swedish has to say (simulating the sound of flicking the tongue) which is very uneasy. (Lily)

At my Swedish school, sometimes, I don't to know how to express (in Swedish), I would speak in Chinese. I shut up immediately and feel embarrassment. (Phil)

# 6.3 Internalized extrinsic motivation in HL learning

Extrinsic motivation is linked to external objectives such as obtaining a reward or avoiding punishment. Extrinsic motivations, according to self-determination theory, can also be self-determined if they are internalized into the self-sense. The previously provided information by children about learning HL initially due to parental requirements and their negative responses to the question of whether they would quit the Chinese school demonstrated that some extrinsic motivation has been internalized into children's intrinsic motivation.

## 6.3.1 Reward

During the interview with children, the rewards not only include the material reward set by the teachers, but also come from their understanding of the reward structure in their immediate environment. The preset reward system in class could help increase children's motivation for HL learning. Within the class, a reward system was developed, and the teacher clearly explained how it would be implemented, i.e., a child could earn a pentagram-shaped logo for one good performance, and ten pentagrams could be exchanged for a gift. Phil has expressed his desire and excitement about receiving the pentagram in interviews when he was asked to talk about the most excited thing about learning Chinese.

I like to attend Chinese schools, because I feel excited about getting the five-pointed star symbol. (Phil)

Along with the obvious benefits, there are some unspoken advantages to learning a language in school. When students become aware of these advantages, their motivation to learn increases. For instance, Rory

discovered that attending school enabled him to make numerous new friends, which made him extremely happy. As a result, he is eager to attend a Chinese school and study.

I love making friends. You see this way I can make good friends in Chinese school. Many of them also come to the taekwondo class. We are in the same taekwondo class too. (Rory)

Children's exposure to information through daily communication also enables them to develop their own reward systems, i.e., what they perceive to be the benefits of language learning. For example, Phil's positive feelings toward China inspired him to pursue a career there when he grew up. His mother advised him that if he wanted a job in China, he needed to learn Chinese well; the reward for learning Chinese that Phil constructed for himself is a future job in China. Zoe establishes fluent communication with her Chinese relatives as a reward for HL learning.

I'm going to work in China when I grow up. I love China. My mom told me to learn to write Chinese characters so I could be better when I grew up. I should be able to write many Chinese characters. (Phil)

My grandmother and my little sister, many of my relatives are in China. They can't speak Swedish. I want to communicate with them, in Chinese. (Zoe)

## 6.3.2 Pressure

The interviewees revealed two distinct types of pressure that contributed to students feeling stressed and compelled to learn Chinese. The first type of pressure is when children recognize their Chinese identity and feel compelled to learn the language. Lily made several references in the interview to her Chinese identity when she was questioned about why she should learn Chinese, which was later revealed to be the result of her parents telling her stories about being born in China as a child.

I just thought, I don't speak Chinese but I'm Chinese, it's a little strange. I am a Chinese because I was born in China. I came to Sweden because my father worked here, so my mom, my elder sister and I came here. (Lily)

It is possible to deduce that the inconsistency between Chinese identity and language created an uncomfortable sense of inconsistency, compelling her to learn Chinese. Phil and Rory also stated unequivocally that one of the reasons they chose to learn Chinese was to distinguish themselves from their Swedish classmates.

Because my mom and dad are both Chinese. We have different appearance because our mother's mother, they are different. (Phil)

Because they are not Chinese, but I am a Chinese. (Rory)

The second type of pressure comes from the child's parents, who require that the child learn their heritage language. Three children (Zoe, Phil, and Mia) stated explicitly in their interviews that their parents urged them to learn Chinese. Mia exemplified her unsatisfactory learning experience by stating that she sometimes felt learning Chinese was difficult, but her mother insisted she learn. The first thing Zoe mentioned in her response to the question of why she wanted to learn Chinese was her mother's request.

Sometimes, I feel Chinese is difficult, but my mom said I had to learn. (Mia)

My mom said I had to learn Chinese. (Zoe)

My mom told me to learn to write Chinese characters so I could be better when I grew up. And then I need to be better. (Phil)

## 6.3.3 The internalization of instrumental motivation

Instrumental motivation is a kind of specific motivation as introduced in Section 3.2. However, in this section, it will focus on the internalization of the instrumental motivation. Which is to say, the motivation does not only come from the instrumental function, but also combines with children's own positive attitudes toward language learning.

One is the child's positive disposition toward heritage language learning combined with the child's interest in reading books written in heritage language, as was discovered in Rory's case. Rory's strong desire to read the Chinese story book independently convinced him of the benefits of learning Chinese; additionally, he has a positive attitude toward Chinese learning, and not just because of his reading interest.

At first my mom and dad made me learn, and I also have a little bit interest in learning Chinese. Because this way I can read *Mi Xiaoquan's school life* (the name of a Chinese storybook) and I don't have to ask my mom (the unknow words), hmmm, I can read it by myself. (Rory)

The other is the integration of the child's developmental goals that require Chinese skills with a positive disposition toward learning Chinese, as was the case with Phil. Phil's passion for China inspired him to pursue a career in the country. His parents advised him that he needed to master Chinese in order to accomplish this goal. He then recognized the critical nature of learning Chinese. Simultaneously, he has a positive attitude toward learning Chinese himself, and not just for the sake of his future job.

# 7 Conclusion

Based on the three research questions that the study has put forward; the current study examines children's motivation for heritage language learning and ascertains their perceptions of HL by interviewing children who are currently learning their HL. Simultaneously, the children's exposure to heritage languages and their language use habits are examined. For this part, Bronfenbrenner's Ecological Systems Theory supports the solid foundation for the investigation of possible influential factors on children's HL learning motivation.

In terms of the heritage language environments that children encounter, it is discovered that many of these environments are created or provided by their parents. Besides, the home literacy resources about Chinese were supported by the parents purposely. Based on the interview with Rory, showed that one of his HL learning motivations was derived from the bedtime stories and the desire to reading these Chinese stories. It is assumable that a broader selection of accessible literacy resources (e.g., books, magazines, games) in HL is likely to support and motivate children's HL learning. Additionally, children's language habits are primarily defined by the following patterns: (i) they are accustomed to speaking the dominant language in that environment, depending on the linguistic context, (ii) they prefer to communicate in the language in which they believe they are more fluent.

Motivation is a crucial factor in children's heritage language learning because it serves as a driving force for learning and progress. It is thus critical to investigate children's motivations for learning heritage languages, to which the present study is devoted. This part's theoretical framework is self-determination theory. It emphasizes that all human behaviors are motivated by self-satisfaction and further divides motivation into intrinsic and extrinsic motivation. Following this logic, the present study examines children's perceptions of HL through the lens of intrinsic and extrinsic motivation. Specifically, this research investigates children's motivation for heritage language learning and seeks to identify the factors or circumstances that contribute to their motivation in developing heritage language.

When reporting on students' intrinsic motivation for heritage language learning, the presentation is divided into three sections: interest, feelings and emotions, and self-evaluation. The interviews reveal that students' interests in HL may be related to deliberate parental nurturing (Chinese bedtime stories) prior to language learning. Children felt both positive and negative emotions over their contact with heritage languages. Self-evaluation would affect their choices in language using habits and HL practicing. Children with higher self-evaluation about their heritage language preferred to use it in daily

life. With the support of language interaction theory (Gass & Mackey, 2014), the frequent language interaction could finally improve their heritage language level.

The extrinsic motivation of students for heritage language learning is divided into three categories: reward, pressure, and the internalization of instrumental motivation. Along with explicit rewards, children may also perceive implicit rewards (e.g., making friends) as a reward. Children's pressure comes from the recognition of self-ethnic identity and parental pressure. Internalization of instrumental motivation requires that students themselves have positive attitudes toward heritage language learning so that when a strong enough extrinsic motivation is present, the internalization will develop.

# 8 Discussion

Although the existing quantitative studies have demonstrated the critical role of parents in their children's heritage language development via questionnaires, there is a dearth of specific insight into how it is influenced (Melo-Pfeifer, 2015; Schalley & Eisenchlas, 2020). This study discovered how parents can motivate their children to learn heritage languages, thereby promoting the development of heritage languages. For example, reading bedtime stories to children can foster an interest in and intrinsic motivation to learn a heritage language. Moreover, children may be extrinsically motivated to learn a heritage language as a result of the pressure they feel when their parents require them to do so.

Furthermore, my findings in intrinsic motivation revealed children's two types of emotions (good and negative) during the HL learning process. This is similar to the previous results (Méndez López & Pea Aguilar, 2013; Oxford & Cuéllar, 2014). In comparison to the previous studies, Méndez López & Pea Aguilar (2013) focused on the example of college students and tested the function of different emotions. They pointed out that generally, positive emotions are more motivating for language learning. However, this does not imply that negative emotions have a detrimental effect on HL learning. Oxford & Cuéllar (2014) also take the university students as the sample and focused on the psychology of their cross-cultural part. They claimed that negative emotions can occasionally serve to increase a language learner's motivation to learn. For instance, confronting difficult areas of high-level learning may increase children's motivation to learn by igniting their competitive spirit.

Lastly, my results about the extrinsic motivation mentioned that children's pressure on HL learning could come from their ethnic identity. The significance of ethnic identity in HL learning has been proved in the previous research, Carreira & Kagan (2011) investigated university school students and found that the desire to know their cultural and linguistic roots was the most frequently mentioned reason for joining HL classes. The other related previous studies mainly focused on the influence of HL in developing children's ethnic identity (Phinney et al.,2001; Lee, 2013) and the impact of parents' ethnic identity in promoting children's HL learning (Li, 1999).

# 9 Reflections and further studies

Due to the small sample size of children, the research results naturally experience a few limitations. At the same time, because the interviewees were children, and despite the fact that the author had referenced extensively existing techniques and knowledge for interviewing children prior to the interview, the interviews were not perfectly conducted. For instance, when the children mentioned their parents' request for them to learn Chinese, I did not immediately follow up to ask about their reactions to this request. Additionally, I occasionally misunderstood the child's thoughts and did not provide the most appropriate guidance when dealing with the child's expressions as a result of my own adult thinking. For instance, when the child mentioned how naughty the little boy in her Swedish class was, I had no idea she was comparing him to the little Chinese boy she remembered. Last but not least, much information was missing due to a lack of follow-up questions.

Based on the present study, several future research topics are warranted. Firstly, it was discovered in this study that students' intrinsic motivation was also influenced by the children's language proficiency in both languages. Stimulation emphasizes that positive feedback from hearing and speaking in actual communication after children have mastered the heritage language can help children increase their motivation to learn the heritage language. Along this line, two issues were raised: first, in a cross-sectional comparison, are children with higher levels of the heritage language in both languages necessarily more motivated to learn HL? Second, do children who have a higher level of heritage language have a greater motivation to learn than children who have a lower level of the heritage language in a longitudinal comparison?

Second, this study discovered that parental demands on children for heritage language learning were associated with children's development of external motivation for learning as a result of the pressure they felt. Is this also related to the child's parent-child relationship? For instance, is it possible that a positive parent-child relationship has a beneficial effect on the development of children's heritage languages? And does a strained parent-child relationship have a detrimental effect?

Finally, 90% of children learning heritage languages come from immigrant families. Children from cross-national marriage families receive heritage language instruction in a very small percentage. Existing research demonstrates that parents play a critical role in their children's acquisition of their heritage language, which is also verified in the current research. As a result, it is uncertain how heritage language speakers in cross-national marriages feel about their children learning their HL and what

motivates their positive or negative attitudes. These are the issues that, in my opinion, deserve to be further explored.

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# 11 Appendix 1: The interview questions

## **Semi-structed Interview questions**

# Home Language

1. How old are you?

Which country is your father from?
 What does your father do for a living?
 What country is your mother from?
 What does your mother do for a living?
 What language do you use when you talk to your dad?
 What language do you use when you talk to mom?
 What language does your father use when he talks with your mom?
 Do you usually need to be a little translator for your mom and dad? How does it make you feel to be

a little interpreter? Do you try to learn Chinese because you need to be a little translator for your mom

## Learning attitudes

or dad? (\*cross-national marriage family)

- 1. Do you remember if you learned to speak Chinese or Swedish first?
- 2. Do you remember when you started to learn Chinese? When did you learn to speak Chinese?

- 3. Before you came to the Chinese school, did your parents ask you if you wanted to come to the Chinese school to study Chinese? (Did they make the decision for you directly?) What's your opinion about it? Did they ask you if you want to continue to attend the Chinese school before this semester started?
- 4. Can you tell us how you feel when you come to the Chinese school every Saturday? Why?
- 5. Now that you are in your second year at the Chinese school, have you ever had any thoughts that you don't want to continue? Did you tell your parents? How did you decide to continue your study in the end?
- 6. When the Chinese school started this semester, some of the children did not continue their studies. Why do you want to continue learning?
- 7. Do you think learning Chinese is interesting? Do you think it is difficult or easy?
- 8. Can you tell us something that happened to you when you were learning Chinese?

### Media

- 1. Do you have Chinese books at home? What is the book about? Is it interesting? Do you like to read it?
- 2. Do you have any books in Swedish at home? What is the book about? Is it interesting? Do you like to read it?
- 3. Which book do you have more at home, Chinese books or Swedish books? Which do you usually read more? Which one do you like more?
- 4. Do you usually watch videos on your computer or cell phone or ipad? Do you usually watch videos in Chinese or Swedish?
- Identity 1. Did you born in Sweden? If not, how old were you when you came to Sweden?
- 2. Have you ever been to China? What is your impression of China?

- 3. Did you speak Chinese during your time in China? Did you talk to the people there? How did you feel?
- 4. Have you ever wondered why the students in your Swedish school class did not speak Chinese? Did you ever wonder why the students in your Swedish school class did not speak Chinese and did not need to learn Chinese?
- 5. How do you feel when you are in the Chinese school and you find out that all the children here speak Chinese as well as you do?
- 6. Do you think you are Chinese or Swedish?

### Social

- 1. Who is your best friend? Does she/he speak Chinese? Do you usually speak Chinese when you play together?
- 2. Which of your relatives speaks Chinese? Do you usually play with her?
- 3. Do you have Chinese speaking classmates in your school in Sweden? Do you talk in Chinese or Swedish at school? How do you feel when you speak Chinese at school? Do you see each other after school and speak Chinese or Swedish?

## Praise

- 1. Did your mom and dad praise you after the Chinese test last semester? How do you feel?
- 2. Do you like it when your teacher praises you in Chinese class? Will you work hard to learn Chinese because you want your teacher to praise you?

## Learning

- 1. How do you feel when you learn to write or read a new Chinese character or word?
- 2. What do you do when you have difficulty in writing Chinese homework? (Give up or ask for help?) How did you feel when you finally succeeded in completing those assignments that you could not write? Do you like this feeling?

# Future

1. What kind of work do you want to do when you grow up? Will it be related to Chinese?