

## Preschool Immersion Education in Persian

by Bita Payesteh and Tara Fortune

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## Importance of Heritage Languages

Research has shown that American adolescents may reap psychosocial and academic benefits, such as closer ties to their families and higher grade point averages if they can communicate in their heritage language (HL) as well as English. Yet many U.S. children who speak a HL at home are at high risk for losing that language when they enter school, where their exposure to (input) and use of (production) English typically becomes primary (e.g., Hmong-English preschoolers in Kan \& Kohnert, 2005; Spanish-English children in Lindholm-Leary, 2014; Mandarin-English bilingual children in Sheng, Lu, \& Kan, 2011). As Espinosa (2013) writes, when additional support for the HL is absent, "advanced linguistic, conceptual, and academic development [are] at risk" (p. 9).

In order to maximize a child's skills in and attitudes towards the HL in a majority English-speaking context, Lewis, Jones, and Baker (2012) recommend allowing the minority language a protected space. One way to do this for young bilingual children is to enroll them in language immersion preschools, which are rapidly increasing in the U.S. While many of these programs offer commonly spoken HLs such as Spanish, some teach less commonly taught languages. Payesteh's (2015) dissertation study, for example, explored the language skills of Persian-English bilingual children who participated in a Persian immersion preschool located in northern California.
One pressing question facing preschool immersion programs is how to best manage language input and production opportunities in both the heritage language and English. Language input, or the amount of language heard by children, and language production, or the amount of language spoken by children, influence the language skills of children; both increased input and production influence proficiency in a language (Pearson, Fernández, Lewedeg, \& Oller, 2007). Other factors affect language development as well, including family income, home literacy, the language of schooling, and parent education.

## Bilingualism Through Preschool Immersion Education

Lindholm-Leary (2014) argues that extensive input in the HL early on is especially advantageous for bilingual children. Preschool immersion programs provide young children with substantial exposure to a heritage or minority language (input) and ample opportunities to speak the language (production) as they participate in typical preschool learning activities.
Research carried out in two-way immersion contexts has
repeatedly found that time spent learning in a minority language will not prevent these children's later acquisition of English. In fact, a strong first language with a solid vocabulary and conceptual knowledge (i.e., understanding objects and their uses) can help children learn the majority language (Paradis, Genesee, \& Crago, 2011). Such findings align with research from other language-focused fields such as speechlanguage science (e.g., Gutierrez-Clellen, 1999; Kan \& Kohnert, 2005).

## Study Context

In the U.S., Persian, the official language of Iran, is a HL spoken in the homes of almost half a million people over the age of five (U.S. Census Bureau, 2012). Despite the number of Persian-speaking people in the U.S. and the importance of bilingualism to most families, there is no research investigating how parental language input and child production influence Persian-English bilingual children's language skills during the preschool years.

This study examined the language abilities of 2- through 5year old Persian-English bilingual children attending a Persian immersion preschool in the U.S. The purpose of the study was (a) to compare the English language skills of Persian-English bilingual preschoolers who attended this preschool with those of English monolingual children, and (b) to determine the relationships between bilingual preschoolers' Persian and English language skills, language input, and language production.

The BI group $(n=15)$ attended a Persian immersion preschool in northern California that provided $100 \%$ Persian language immersion using Montessori methods. BI participants were U.S.-born and $82 \%$ came from bicultural families with at least one parent of Persian ethnicity; most were primarily simultaneous bilinguals, exposed to both languages from birth, with three first exposed to Persian at preschool (ages 2;0 to $2 ; 6$ ). English-only (EO) participants ( $n=17$ ) were recruited from a monolingual English Montessori preschool in a large Midwestern city. The two groups were age-matched and comparable with regard to parental education and household income; more than $85 \%$ were college educated and had middle to upper income levels.

## Study Design

The BI participants completed four standardized language tasks targeting English vocabulary and morphosyntax, and four interpreted Persian versions. Scores were aggregated to create composite scores: vocabulary, morphosyntax, receptive, and expressive. The elicitation tasks accounted for cultural and
linguistic differences and went through three rounds of review by Persian-English bilinguals to ensure accuracy and cultural appropriateness. EO participants completed the same four tasks in English only. Parents completed a demographic and language information questionnaire. Parents of children in the BI group reported the percentage of time they spoke Persian and English to their child (i.e., input) and the percentage of time their child spoke Persian and English (i.e., production). Parents confirmed the absence of developmental or cognitive delays and adequate hearing ability.
Input for the BI group was calculated as the percentage of time parents reported speaking to their child in Persian and English. Production was calculated as the percentage of time that children spoke Persian and English across specified settings (e.g., at home, at school, when reading, with parents, with grandparents).

## Results

There were no statistically significant differences in the performance of the BI and EO groups on the English language tasks. This suggests that 100\% Persian-medium education at the preschool level was not detrimental to English language development. Wilcoxon Rank Sum test results revealed that the BI group performed significantly better on the English tasks than on the Persian tasks ( $p<0.01$ : Persian mean rank $=15.59$, English mean rank = 19.41).
BI parental input. BI parents provided a wide range of English and Persian language input to their children (English: $2 \%$ to $90 \%$; Persian: $18 \%$ to $97 \%$ ). Greater Persian input was related to stronger Persian language skills, particularly on expressive and vocabulary language tasks (Persian vocabulary composite: $r=0.42$ ), and with lower English scores (e.g., morphosyntax: $r=-0.30$ ). Importantly, greater Persian input promoted strength in the more-difficult-to-maintain heritage language (Pearson et al., 1997). The amount of English input from BI parents had a moderate, negative relationship with their child's Persian language skills, primarily with expressive language ( $r=-0.42$ ) and morphosyntax, and had a weak, positive effect on English morphosyntax.
BI child production. Overall, BI participants spent about $53 \%$ of their day speaking Persian (range $=19 \%$ to $98 \%$ ). Persian language production had a moderate, positive relationship with BI children's Persian task performance (morphosyntax tasks: $r$ $=0.40$ ), and a very weak, negative relationship with English task performance (expressive composite: $r=-0.17$ ). English language production had a moderate, negative relationship with BI preschoolers' performance on Persian language tasks (morphosyntax composite: $r=-0.58$; and expressive composite: $r=-0.45$ ), and a very weak, positive relationship with English language scores (expressive composite: $r=.10$ ). In general, the more English the children spoke, the lower their Persian scores tended to be.
In sum, the relationships between BI child language production and language skills are similar to findings in other studies, e.g. Bohman et al. (2010) who found that for bilinguals, greater language production in each of their languages was related to higher vocabulary and morphosyntactic abilities within the same language. These results also support theories of bilingual language development of Pearson et al. (1997) and Kohnert (2013) who suggest that input and production play important roles in the linguistic development of bilingual children. Despite the lack of
significance, notable trends suggest that in this context the heritage language (Persian) is more vulnerable and requires greater support than the majority language (English).

## Action Steps

Preschool children in this study who received large amounts of input at preschool and home in Persian, a minority HL, still demonstrated stronger English vs. Persian skills. Other research has confirmed that greater input in the HL is necessary for it to be comparable to the language of the majority community (Pearson et al., 1997; Vihman, Lum, Thierry, Nakai, \& KerenPortnoy, 2006). Pearson et al. (1997) suggest that even in a Spanish-speaking community (e.g., Miami), it may be harder for a child to learn Spanish as opposed to English. Research on the relative difficulty in which HLs develop as compared to English in the U.S. and findings from this study suggest that preschool immersion educators and BI parents can actively support HL development in the home and maximize HL input for their children even with a $100 \%$ immersion program. It is important to note that findings from this study stem from families with socioeconomic and educational advantages and thus may not apply to all HL contexts.
If our ultimate goal in the education of bilingual children is social emotional wellbeing and academic achievement through continued maintenance and school-based support for their bilingualism and biliteracy, then providing, allowing, and promoting high quality preschool immersion in the HL may provide an early learning pathway. Findings from this study suggest that the HL skills of young bilingual children were strengthened when family members and early childhood educators made extensive use of the HL at home and at preschool. As importantly, the BI children's English language development was on par with that of matched English-only preschoolers.

This study adds to a body of literature that assures parents and educators that by speaking and teaching in the minority language, they are not harming their children's chances and abilities to acquire the majority language (e.g., Kan \& Kohnert, 2005; Lindholm-Leary, 2014; Paradis, Genesee, \& Crago, 2011). On the contrary, they are supporting their children's potential to take advantage of the substantial benefits that come from speaking the heritage language and being bilingual. These are advantages for a lifetime.

## Selected References

Espinosa, L. M. (2013). PreK-3rd: Challenging common myths about dual language learners: An update to the seminal 2008 report. New York: Foundation for Child Development.
Kohnert, K. (2013). Language disorders in bilingual children and adults, $2^{\text {nd }}$ edition. San Diego, CA: Plural Publishing.
Lindholm-Leary, K. (2014). Bilingual and biliteracy skills in young Spanish-speaking low-SES children: Impact of instructional language and primary language proficiency. International Journal of Bilingual Education and Bilingualism, 17(2), 144-159.
Paradis, J., Genesee, F., \& Crago, M. (2011). Dual language development and disorders: A handbook on bilingualism and second language learning, $2^{\text {nd }}$ edition. Baltimore, MD: Brookes Publishing Co.
Pearson, B. Z., Fernández, S. C., Lewedeg, V., \& Oller, D. K. (1997). The relation of input factors to lexical learning by bilingual infants. Applied Psycholinguistics, 18(1), 41-58.

