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# Health Literacy and Children Language Brokers: How Bilingual Children and Spanish-Speaking Parents Navigate the Medical Setting

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## I. Introduction

Patients' health literacy, or ability to comprehend and understand health information, influences their health status, knowledge about medical care and conditions, and hospitalization and adherence rate (Andrus, & Roth, 2002). Lack of an adequate understanding of health literacy can place patients in a very vulnerable position and lead to serious consequences such as poor health status, lack of knowledge about medical care and medical conditions, decreased comprehension of medical information, and increased hospitalization (Andrus & Roth, 2002). Low-English proficiency patients are especially at risk, given they must overcome English and health literacy barriers.

Oftentimes, children of patients with limited English language skills will language broker, or translate cultural and linguistic information for their parents (Morales & Hanson, 2005).

**RQ1**: What are health literacy levels of children who language broker?
**RQ2**: How do parents and children combine their knowledge, as the skills of one may compensate for the skills of the other?

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## II. Methods

Survey data was collected from 100 parent-child dyads of low-income, predominantly Mexican heritage households from the Chicago area to measure health literacy levels among parents and children using the Test of Functional Health Literacy Assessment (TOFHLA; Parker et al., 1995). SPSS was used to correlate the variables and analyze the data.

**Figure 1** – Demographics

| | N | Mean | SD | Min & Max |
|---|---|---|---|---|
| **Children** | | | | |
| Ability to speak English | 100 | 3.64 | 0.65 | 1 to 4 |
| Speak Spanish | 100 | 3.53 | 0.65 | 1 to 4 |
| Health Literacy Levels | 99 | 76.77 | 19.59 | 16 to 100 |
| Age | 100 | 13.22 | 2.07 | 9 to 18 |
| Male | 45 | | | |
| Female | 55 | | | |
| **Parents** | | | | |
| Ability to understand English | 100 | 2.09 | 0.91 | 1 to 4 |
| Speak English | 100 | 1.54 | 0.67 | 1 to 3 |
| Read English | 100 | 1.71 | 0.76 | 1 to 4 |
| Write in English | 100 | 1.55 | 0.79 | 1 to 4 |
| Foreign Language Anxiety | 100 | 3.49 | 1.25 | 1 to 5 |
| Self- Efficacy | 100 | 2.92 | 0.77 | 1 to 4 |
| Age | 100 | 37.96 | 5.66 | 25 to 56 |
| Male | 13 | | | |
| Female | 86 | | | |

## Health Literacy Example

PENICILLIN VK
250MG 40/0
Take one tablet by mouth four times a day

Corresponding question based on the medicine label to the left:
**If you take your first tablet at 7:00am, when should you take the next one?**
*Accepted answers: 10am (12 hr day) to 3pm (24 hr day)*

## III. Results

**Research Question 1**
Results revealed that 25% of language brokers had inadequate health literacy (i.e., below an 8th grade level); 75% had adequate health literacy.
*See Figure 2.

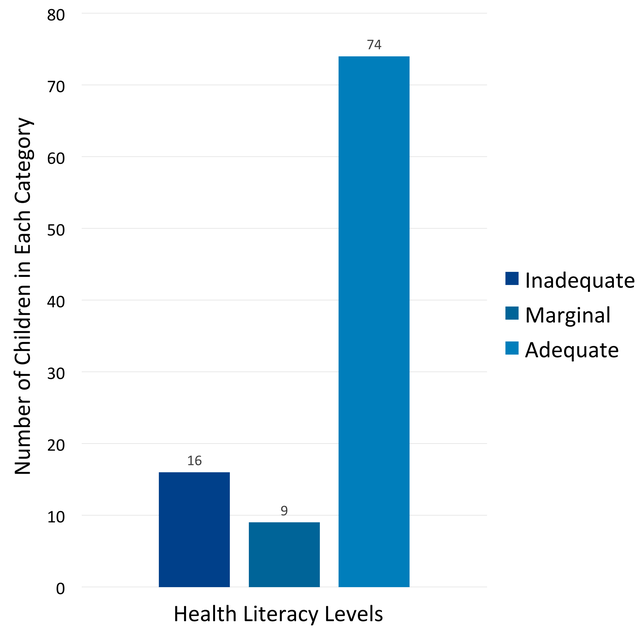
**Research Question 2**
Child health literacy levels correlated with parent self-efficacy (r = -.28**), parent foreign language anxiety (r = .29**), and parent ability to read English (r = .23*). Child health literacy increased as parent self- efficacy decreased. Parent Foreign Language Anxiety and parent ability to read English were positively correlated with child health literacy levels. As each variable increased, child health literacy level increased as well.

## IV. Conclusions

Many children brokers have functional health literacy. While parents may help their children increase health literacy in low-pressure situations (e.g., reading English documents), during a medical conversation, parents who are anxious and lack self-efficacy have children who compensate with increased health literacy for the parent's lack of social skills.

Having low health literacy levels and a lack of English skills can affect both the child and parent. It can affect the parent physically and mentally if the parent does not receive adequate information about the health issues. Also, brokering in this setting can be very stressful on the child, especially if the child does not have the skills necessary to successfully navigate the situation.

**Figure 2** – Health Literacy Levels of Children




## V. References

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