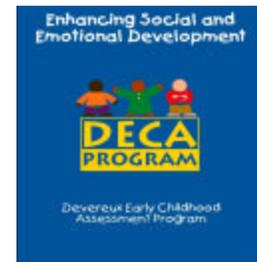


## Devereux Early Childhood Initiative Research Bulletin #4

The Devereux Early Childhood Initiative  
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### Topic: Development of the Spanish Language version of the DECA

#### Purpose:

When first published, the Devereux Early Childhood Assessment (DECA) (LeBuffe & Naglieri, 1999) was available only in English. As the DECA was implemented throughout the country, the need for a Spanish language version of the DECA became apparent. This report summarizes the development of the Spanish Language DECA (DECA-Sp) as well as the research studies demonstrating the appropriateness of the norms derived from the English language version of the DECA with the DECA-Sp.

#### Method:

##### Development of the Spanish language DECA

A double or simultaneous translation approach was used in the development of the DECA-Sp. The first step was to translate the English DECA into Spanish. A professional translator with experience in the early childhood field provided the translation. Specific attention was paid to avoiding culture-specific terms and expressions. That is, standard Spanish was used as much as possible.

The initial translation was then sent to three bilingual (Spanish- and English-speaking) individuals who translated the Spanish language draft back into English. These English versions were then compared to the original English language DECA. Discrepancies between the two English versions were minimal indicating that the Spanish translation was very accurate. The few differences in the English versions were discussed with the professional translator and changes in the Spanish language version were made as indicated.

Finally, in the equivalence study described below, participants were asked to identify any words that were unfamiliar or confusing. A few words were identified as being unfamiliar or having different meanings for specific cultures. For instance, the word *rabia* to Mexican-Americans implies “rabies” rather than its intended meaning of “anger.” Therefore, the more generic term *enojo* was used in the final published version.

##### Equivalence of Spanish and English Versions

The DECA norms were developed with the English language version. Therefore, before these norms could be used with the Spanish language DECA, it had to be demonstrated that the language of the form did not influence the ratings that the child received. That is, the child would receive the same ratings regardless of which language version was used.

To establish the equivalence of the two forms, 92 bilingual individuals (44 parents and 48 teachers) rated a child using both English and Spanish versions of the DECA. As shown in Table 1, these 92 individuals represented a wide range of Latino cultures. Half of these individuals rated the child first in English, then in Spanish. The other half rated the child first in Spanish, then in English. In addition, between the two ratings, each rater completed a questionnaire regarding his/her fluency in both languages. If the rater indicated that either his/her Spanish or English reading skills were “poor” or answered “no” to the question, “Do you consider yourself

to be a bilingual person?" that rater was excluded from the study. All three forms were completed in the same sitting.

**Results:**

A paired sample *t*-test was used to compare the ratings obtained by the child on the two different language versions of the DECA. A separate *t*-test was conducted for each of the five scales (Initiative, Self-control, Attachment, Total Protective Factors, and Behavioral Concerns). A significant result would indicate that children received different scores on the two versions of the DECA, demonstrating that the language influenced the ratings. Conversely, nonsignificant differences would indicate that the children received the same rating on both versions. As shown in Tables 2 and 3, for both parent and teacher raters, all *t*-tests were nonsignificant indicating that the language of the form did not influence the rating the child received. Because the language did not influence the ratings, the DECA norms can be used with confidence with either the English language or Spanish language version.

**Tables**

*Table 1: Ethnic Representation of Bilingual Individuals*

<b>Ethnicity</b>	<b>Percentage</b>
Anglo	9 %
Asian	1 %
Central American	4 %
Cuban	2 %
Mexican	49 %
Puerto Rican	24 %
South American	1 %
Spanish	6 %
Hispanic	3 %
Did not specify	1 %

*Table 2: Comparison of Parent Ratings for English and Spanish language Versions of the DECA*

	Mean for English Version	Mean for Spanish Version	<i>t</i>	Significance
Initiative	46.30	45.48	1.677	NS
Self-Control	47.39	47.80	-.539	NS
Attachment	42.36	43.11	-1.119	NS
Total Protective Factors	44.20	43.93	.680	NS
Behavioral Concerns	62.18	62.36	-.203	NS

*Table 3: Comparison of Teacher Ratings for English and Spanish language Versions of the DECA*

	Mean for English Version	Mean for Spanish Version	<i>t</i>	Significance
Initiative	52.98	53.40	-1.029	NS
Self-Control	52.81	52.73	.090	NS
Attachment	52.02	51.21	1.212	NS
Total Protective Factors	52.29	52.60	-.699	NS
Behavioral Concerns	53.00	53.06	-.108	NS

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