This article was downloaded by: [University of Illinois at Urbana-

Champaign]

On: 07 October 2013, At: 19:11

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street,

London W1T 3JH, UK



Journal of Reading, Writing, and Learning Disabilities International: Overcoming Learning Difficulties

Publication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/urwl19

Identifying Language Disorders in Spanish-speakers

Alba N. Ambert

Published online: 28 Jul 2006.

To cite this article: Alba N. Ambert (1986) Identifying Language Disorders in Spanish-speakers, Journal of Reading, Writing, and Learning Disabilities International: Overcoming Learning Difficulties, 2:1, 21-41, DOI:

10.1080/0748763860020104

To link to this article: http://dx.doi.org/10.1080/0748763860020104

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities

whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at http://www.tandfonline.com/page/terms-and-conditions

Identifying Language Disorders in Spanish-speakers

Alba N. Ambert

Historically and currently, limited English children have been placed proficient (LEP) education not they special programs, because established presented clearly learning impairments, but because they were unable to meet school expectations for functioning in English (Mercer, 1971; Tucker, 1980; Zabel, 1980; Cummins, 1984). Others have been placed in special classes due to differences in language dialect and/or cultural (Ambert and Melendez, differences 1985). of these children are categorized as language disordered.

Complex linguistic issues affect the diagnosis of true language disorders in Spanish-speaking children living in bilingual settings. Hispanic children whose English and Spanish varies form and function may be misidentified as language disordered, if evaluated in English before they acquired mastery of that language. have fully Despite the critical impact appropriate evaluation of English language proficiency has on LEP children's educational placement, it is often performed improperly. An accurate appraisal of English language proficiency requires examination of diverse variables such as rate of English language acquisition, native language influence, motivation, and nature of instructional program to which the child has been exposed. requirement is a global language assesment which

includes not only discrete items (syntax, semantics, morphology and phonology), but a child's communicative competence (the use of language for different purposes). Unless a complete assessment of English language proficiency is per-Spanish-speaking children may to be fluent in English because they have acquired superficial aspects of the language. English for assessment and instructional purposes reveal pseudo-deficits LEP children will in language which are, in fact, simply gaps in children's mastery of English at levels and not true language disorders LEP children who do not exhibit true language impairments should not be classified as impaired solely because of limitations in English or because of cultural or dialectical differences.

In spite of these concerns, there are LEP children who do present true language disorders, and educational practitioners must meet the challenge of assessing these children appropriately. valid. non-discriminatory assessment to take place, Hispanic children of limited English proficiency who appear to experience language disorders must be assessed in Spanish by cliniwith native-like fluency who are familiar with the regional variety of the language spoken in the children's linguistic community. However. little research has been done on the linguistic characteristics of Spanish-speaking, language-disordered children living in the United Lack of information makes it difficult for practitioners to effectively identify Spanishspeakers with true language disorders.

Linares-Orama (1977) studied the applicability of diagnostic measures for the evaluation of syntax in preschool Spanish-speaking youngsters to determine deviancy. The study compared the

performance of normal and language disordered Puerto Rican children three-year-old living Puerto Rico. They were tested to determine whether the mean length of utterance and Lee's Developmental Sentence Scoring Procedure (1974) adapted for Spanish by Toronto (1972, 1976) were sensitive to the linguistic differences of Puerto Rican children within the three-year range. The results were positive.

Two groups of twenty-five Spanish-speaking children between the ages of six and eight were by (1977,Wyszewianski-Langdon group was developing normally, the second group was composed of language disordered youngseries of tests was administered to children, Spanish and English, in articulation of of words, articulation connected speech, auditory discrimination, sentence comprehension, sentence repetition sentence expression. After an analysis of test results and comparisons between the groups, the concludes that the language disordered group made more errors in both Spanish and English than the control group.

Merino (1983) compared and contrasted the language development of normal and language dis-Spanish-speaking children of limited proficiency. A battery of tests administered to fifty monolingual Spanish-speakers in Mexico to establish baseline data. The same was then administered to a group Spanish-speaking twenty-two language disordered the United States. It was children in presented that the language disordered group difficulties in oral production skills, but not in comprehension. Since comprehension was tested by asking the child to select one of two pictures, the results for the comprehension part of the test were less dependable, according to the author. Merino concludes that significant differences in performance exist between the language disordered and non-language disordered children on the tests.

Pragmatic criteria were compared with traditional surface structure criteria in the diagnolanguage disorders in bilingual children in a study performed by Damico, et al. Spontaneous language samples were obtained from Spanish/English bilingual children six and eight years of age who had been referred special education evaluation. The language examined for following were normalcy structural pragmatic criteria. and to the authors. results of the study that the two sets of criteria identified different subgroups as language impaired and that the pragmatic criteria were more effective in predicting school achievement over a seven-month period.

studies provide valuable information applicability of diagnostic adapted for Spanish-speakers and on the importance of utilizing pragmatic criteria with traditional criteria in structural assessing language-disordered children. They also provide comparisons of language-disordered Spanish-speakers and children who are developing Spanish normally. theless, we have much to explore concerning the nature and characteristics of true language dis-Spanish-speaking in children the United States.

The Study

The purpose of this investigation was to identify the characteristics of Spanish-speaking children living in the United States who have

true language disorders and who are of limited English proficiency. study focused on the The characteristics specific of these children's expressive language Spanish. receptive and in of English on their linguistic The influence development was considered, as well as dialectical differences in the Spanish spoken by the children involved in the study.

Subjects

A group of thirty Spanish-speaking Puerto Rican children, who were both LEP and language disordered, were selected for the study. children were between the ages of five and twelve and attended public schools in Boston, Massachusetts, and Hartford, Connecticut. As determined by the school district's administration of in both English Language Assessment Scales the children were Spanish-dominant. Home language surveys indicated that the primary language of their homes was Spanish. The children were identified as language disordered by qualified bilingual speech and language pathologists who were fluent in Spanish and familiar with the regional variety of Spanish spoken by the The children were not mentally retarded children. nor did they exhibit any physical impairments. Their language difficulties were not due to English language acquisition or bilingualism and were present in their native language. participating in bilingual children were education programs.

Method

Spanish language samples were collected on the subjects' spontaneous speech production following Bloom and Lahey's language elicitation techniques (1978). At least one hundred different

utterances were collected for each child, using story books and a set of ten pictures picture language samples were to elicit language. The for global linguistic transcribed and analyzed performance, including structural analysis (phonomorphology, syntax, and semantics) pragmatic analysis (meaningful verbal and In analyzing the verbal interaction). developmental samples, the stages of language acquisition were considered. Specifically used for this purpose was Gili-Gaya's (1974) analysis of the manner in which fifty Rican children between the ages of four and seven used language as a communication tool and for representation of An analysis of syntacideas. by the children structures used was also Also used as a comparison was Ambert's study of thirty five-year-old speaking children in Hartford, Connecticut, whose language was developing normally.

Results of the Study

The terms language disorders, language impairments and deviant language will be used interchangeably in this article to define a condition wherein a disruption in the learning of a native language occurs (Bloom and Lahey, 1978). quage processing and language production problems are evident in the language-disordered youngster Language-disordered Semel, 1976). and fail to make of the linguistic children some generalizations necessary for appropriate of syntactic and morphological structures (Leonard, 1972), and they appear to deviate from normal children in the frequency of usage of different grammatical structures. Menyuk (1975) confirms the breakdown of the internalization of the grammaintaining that language-disordered children are not simply delayed in the normal language

developmental process. Although they to lag behind normally developing age peers on different aspects of language, it should not be assumed that these children will in time acquire language as normal speakers. In addition. children with language disorders may have difficulty not only knowing the rules of appropriate language use, but also understanding the behaviors which correspond to language use (Carrow-Woolfolk They lack some of the disand Lynch, 1982). course, sociolinguistic and strategic competence to communicate effectively (Kessler, 1984).

True language disorders identified in this study were categorized into disorders of receptive language and disorders of expressive language. The characteristics include structural language problems as well as pragmatic language difficul-The disorders experienced by the children in this study were evident in their general linquistic development, which in this case was in The developmental stages of Spanish language acquisition were considered when determining whether an utterance was normal or deviant. When a five-year old, for example, overgeneralized in the formation of verb tenses (using pusio instead of puso, that is, putted instead of put) or was unable to blend the p and 1 sounds (saying pato instead of plato in the Spanish word for plate), it was not counted as a language deviancy. When an eight-year old produced these types of however, they were considered deviant. In addition, studies on the acquisition of Spanish as a first language were used to establish de-Besides the Gili-Gaya (1974) and Ambert viancy. which were used extensively, studies, the following studies were used: Montes-Giraldo's (1971) study on the chronological emergence of linguistic structures in four Spanish-speaking children; Gonzalez's (1979) study of syntactical

features in Spanish-speaker's language; and Belendez's (1980) study of the pattern of acquisition of the Spanish verb system in Puerto Rican children. Linguistic differences which were dialectically motivated were not considered to be deviant.

Examples of the types of errors made by children who were between the ages of eight and the following pages. are presented on In these examples, the child's utterance is given (/)followed bv a slash and the correct communication. example, the intended For pusio/puso (putted/put) means the child instead of puso. Ιf intent is pusio Because of the syntactical it is not indicated. differences Spanish and English, between translations are as accurate as possible, though Errors were evident in both not always exact. the receptive and expressive domains.

Receptive Language Disorders

The children in this study had intact auditory acuity, but could not process what they heard. They had difficulties establishing associations between words and meanings and in understanding questions, and had problems with auditory discrimination, word retrieval, and the ability to use gender agreement. Specific examples are as follows:

• The children were unable to associate sounds with objects or experiences. For example, some of the children could hear a word such as Lapiz (give me a pencil), they would be unable to make the connection between the word and the object requested.

• The children could not discriminate tones, phonemes and morphemes.

tata/pata (duck) pinto/pintor (painter) eron/eran (were) dio/dijo (said) migo/amigo (friend) dena/cadena (chain)

• The children were unable to remember words easily and often stumbled in their speech.

Child: entonces la cosa...ccomo se dice esto? (then the thing...how do you say this?)

Teacher: la cáscara (the peel)

Child: la cascara/y lo. la cosa que tan ccomo

se dice?

(the peel/and the thing that so how do

you say it?)

Teacher: la cáscara (the peel)

Child: y entonces la cosa aquella de adentro

(and then that thing there inside)

The children experienced difficulties with gender agreement and with the use of appropriate grammatical markers for gender. (In Spanish, articles, adjectives, and pronouns carry grammatical markers which, in most cases, are either masculine or feminine.) According to Gili-Gaya (1974), by the age of four, children have consolidated the knowledge of gender which is learned through the association of each noun with the article. adjective and pronoun with which The idea of this permanent association agrees. is tied in with the meaning of the noun and childfour years utilize gender without of problem, prior to their concept of the sexes. This is confirmed by Ambert's (1985) study of five-year-olds. The following illustrates errors of gender found in the present sample (errors are underlined):

<u>lo mama/la mama (the mother)</u> pieza es<u>to/esta</u> pieza (this piece)

Question: Como se sintio la mama? (How did the mother feel?)

Child: Contento/contenta (happy)

 The children experienced pragmatic difficulties in their receptive language. They were unable to understand who, what, where, and why questions.

Question: dQuien se comio eso? (Who ate that?)

Child: sopa (soup)

Question: ¿Que rompio el nino? (What did the boy

break?

Child: Esta enferma (she's sick)

Question: cA donde fue Juan? (Where did Juan go?)

Child: Agriquitol (farmer)

Question: cPor que se mojo el lobo? (Why did the

wolf get wet?)

Child: 'tornudo (sneezed)

Expressive Language Disorders

A disorder of comprehension will necessarily affect verbal expression. Language comprehension is a skill which develops prior to full development of expressive language. Children who fail to understand do not use meaningful spoken language (Myklebust, 1954).

The language-disordered children in this study experienced varied expressive language disorders in articulation, syntax, semantics, and pragmatic language.

Articulation:

The children often had difficulty pronouncing consonant sounds which require precise articulation, such as the s, l, r, and trilled r sounds, errors which were not consonant with their own community's language. For example, the regional variety of Spanish spoken by Puerto Ricans, it is common to aspire the s as in ehcuela or casah of escuela (school) casas (houses). It is also a characteristic of the Spanish spoken in Puerto Rico to transform the medial and final r into an l, as in puelco of instead puerco (pig) and miral instead of mirar (to look). These characteristics the Spanish spoken by Puerto Ricans not be construed as language deviancy. simply reflect a particular linguistic community's children language usage. Errors made by the in this study deviated from their own speech community's language patterns. For example, instead of aspirating the s, they would omit it entirely, and they would make inappropriate substitutions of the r and the trilled r as in the following examples:

plimo/primo (cousin) canino/carino (affection) yompio/rompio (broke) cayo/carro (car)
bucala/buscarla
 (look for)
casa/casas (houses)

The language-disordered children also substituted, omitted, and distorted sounds:

espierto/desperto (awoke) otia/otra (another) losotro/nosotros (we) seemdivo/se me olvido
 (I forgot)
guaba/guagua (bus)
ajana/regana (scold)

• They reversed the order of sounds in words: quichoto/chiquito (small) tabaca/estaba (was)

and constricted words:

ah/agua (water) cho/echo (put) voa/voy a (I'm going to) po/pero (but)

• They could not blend isolated sounds into meaningful segments, even though they could distinguish and produce such sounds as \underline{b} , \underline{l} , \underline{g} , \underline{r} , \underline{n} , \underline{s} , \underline{t} :

anco/blanco (white) motro/monstruo (monster) binco/brinco (jumped) pato/plato (plate)

Syntax:

Oral syntax disordered were evident in the children studied.

 They omitted essential parts of the grammar, such as articles, pronouns, prepositions, the copulas <u>ser</u> and <u>estar</u>, the reflexive pronoun <u>se</u>, and conjunctions:

casa mia es/esa casa es mia (that is my house)

muneco muneca/un muneco y una muneca (a doll and a doll)

contento/esta contento (is happy)

un queso/con un queso (with a cheese)

el fue/el se fue (he left)

mia muneca/la muneca es mia (the doll is mine)

- They used incorrect word order:
- olvidó eso Luis/A Luis se le olvidó eso (Luis forgot that)
- jirafa quiere el/el quiere la jirafa (he wants the giraffe)
- Charlie Brown yo lo vi/yo vi a Charlie Brown (I saw Charlie Brown)
- ullet They substituted articles, pronouns and other grammatical structures with the <u>schwa</u> sound, which is written with the symbol ∂ and pronounced as the e in roses.
- ċ ∂ pegaron eso? ¿Quiénes pegaron eso? (Who pasted that?)
- eso vuela (that flies)
- pongo 'torio Luis/lo pongo en el escritorio de Luis (I put it in Luis' desk)
- guardo hago esta/lo guardo y hago esta (I'll save it and do this one)
- They exhibited lack of noun-verb and articlenoun agreement.
- el sapo no puedan hablar/los sapos no puedan hablar (frogs cannot talk)

lo mama/la mama (the mother)

se cayo'/se cayeron (they fell)

They omitted plural endings.

dos árbol/dos árboles (two trees)

se montaron solo/se montaron solos (they got on alone)

tumbo flor/tumbo las flores (knocked down the flowers)

They confused verb tenses.

pónelo/pónlos (put them)
viste/vi (I saw)
hació/hizo (made)
cayó las flores/las flores se cayeron (the flowers
fell)

 Omission of the auxiliary <u>estar</u> in the present progressive form was common.

corriendo/está corriendo (is running) jugando/está jugando (is playing)

Semantics:

The children in this study demonstrated difficulties with word meanings:

 They used inappropriate verbal labels for common objects, actions, and persons.

música/película (music/film)
radio/teléfono (radio/telephone)
hablar/sonreir (talk/smile)
niño/conejito (boy/bunny)

• They used circumlocution when they could not retrieve words.

papel que se usa pa'buscar en la tierra/mapa (paper that's used to look in the ground/map

una traba que se mece/columpio (a board that sways/swing)

la luz que se cambia pa' cororá/semáforo (the light that changes to red/traffic light

no hace frío y hace calor/verano (it's not cold and it's hot/summer)

In the pragmatic area of expressive language disorders, the children had difficulties retelling stories or narrating personal experiences. frequently depended on gestures and to be understood.

Question: cSi? cQue te paso? Cuentame.

(Really? What happened?

Child: No response.

Ouestion: cA donde fue Juan? (Where did Juan go?)

Child: a la...ccomo se dice eso? (to the...how

do you say that?)

Question: ¿Te gustaba ordeñar la cabra?

like to milk the goat?)

Child: Ajá.y entonces y pue cuando la cabla.

(Aha.and then and so when the goat.)

Question: ccómo se llaman tus amigos? (What are

your friends' names?)

Child: Yo no sé. (I don't know)

The children had difficulty classifying events with verbal labels and organizing words in appropriate sentences.

y había soda por dentro que había una tiendita/ había una tiendita que tenía soda (there was a store which had soda)

lo puso así [gestures] a que lo puso así y lo hizo bien (he put it like this [gestures] put it like this and did well)

 They were unable to correct grammatical errors in sentence constructions in many instances.

y la senora.am.le hizo a lo carro que paren/ y la senora hizo que los carros pararan (the lady made the cars stop)

todo el lado/todos los lados (on all sides)

In addition to the linguistic deviations described, the use of idiomatic expressions was rare in the children studied, as was the use of adjectives, adverbs, possessive articles other than mi or mio, the use of the present progressive, prepositions, the reflexive se, the auxiliaries ser and estar, copulas ser and estar, and the periphrastic future (ir a + infinitive).

Although the Spanish-speaking language-disordered children described in this study were participating in English-as-a-Second (ESL) programs, the English language influence their acquisition of Spanish was minimal. only discernible English influence evident was in vocabulary. They used words such as Istel/ Easter, estim/steam, matre/mattress, fensa/fence, listi/lipstick, hi and hall. It is common for Spanish-speakers living in the United to use these English terms with a Spanish pronunciation and their use is not indicative of a language disorder.

Conclusion

Hispanic children of limited English profifrequently misidentified ciency have been language disordered. This situation occurs when they are assessed in English, a language they do not master, or when they are observed in an instructional program all-English where performance is judged against the performance speakers of the English lanquage. native Misidentification also occurs when Hispanic LEP children are assessed in Spanish by assessors who are not fluent in Spanish and/or not familiar with the regional variety of Spanish spoken by Educational practitioners must exerthe child. cise much caution and ascertain that the LEP children's assessments are performed in the native by qualified bilingual professionals language according to legal requirements and sound educational practices.

Since there <u>are</u> instances in which Hispanic LEP children experience linguistic difficulties in the native language due to a language impairment, it is essential that practitioners recognize the nature and characteristics of language impairments in Spanish-speaking children.

The purpose of the present study was to describe the characteristics of Spanish-speaking children with true language disorders to assist educators in appropriately identifying LEP Hispanic children who would benefit from a language intervention program.

It was found that the language of language disordered Hispanic children of limited-English

proficiency included in this study deviated from the language of Spanish-speaking children acquirlanguage normally. The children presented well structural difficulties as as pragmatic studied were The children living in problems. a bilingual setting, yet the impact of on their language development was minimal.

References

- Ambert, A. N. "Language enriched Spanish-speaking children." Massachusetts Institute of Technology, Cambridge, Massachusetts, 1985 (to be published).
- Ambert, A. N. "The identification of LEP children with special needs." <u>Bilingual Journal</u>, 1982, 6:17-22.
- Ambert, A. N., and Melendez, S. E. <u>Bilingual</u>
 <u>Education: A Sourcebook</u>. New York: Garland
 Publishing, 1985.
- Belendez, P. Repetitions and the Acquisition of the Spanish Verb System. Unpublished doctoral dissertation, Harvard University Graduate School of Education, 1980.
- Bloom, L., and Lahey, M. <u>Language Development</u> and <u>Language Disorders</u>. New York: Wiley, 1978.
- Carrow-Woolfolk, E., and Lynch, J. I. An Integrative Approach to Language Disorders in Children. Grune & Stratton, 1982.
- Cummins, J. <u>Bilingualism and Special Education:</u>
 <u>Issues in Assessment and Pedagogy.</u> Avon,
 <u>England: Multilingual Matters, 1984.</u>

- Damico, J. S.; Oller, J. W.; and Storey, M. E. "The diagnosis of language disorders in bilingual children: Surface-oriented and pragmatic criteria." Journal of Speech and Hearing Disorders, 1973, 46:385-394.
- Gili-Gaya, S. Estudios de lenguaje infantil. Barcelona, Spain: Vox Bibliograf, 1974.
- Gonzalez, G. The Acquisition of Spanish Grammar by Native Spanish-Speaking Children. Rossly, VA: National Clearinghouse for Bilingual Education, 979.
- Kessler, C. "Language acquisition in bilingual children." In Miller, N. (Ed.), Bilingualism and Language Disability. San Diego, CA: College Hill Press, 1984.
- Lee, L. Developmental Sentence Analysis. Evanston, IL: Northwestern University Press, 1974.
- Leonard, L. B. "What is deviant language?" Journal of Speech and Hearing Disorders, 1972, 37:427-446.
- Linares-Orama, N. "Evaluation of syntax in threeyear-old Spanish-speaking Puerto Rican children." Journal of Speech and Hearing Research, 1977, 20:350-357.
- Menyuk, P. "Children with language problems: What's the problem?" In Dato, D. P. (Ed.), Georgetown University Roundtable on Languages and Linguistics. Washington, D.C.: Georgetown University Press, 1975.
- Mercer, J. R. "Institutionalized anglocentrism: Labeling mental retardates in ten schools."

- In Orleans, P., and Russel, W. (Eds.), <u>Race</u>, <u>Change and Urban Society</u>. Los Angeles, CA: Sage Publications, 1971.
- Merino, B. J. "Language development in normal and language handicapped Spanish-speaking children.: <u>Hispanic Journal of Behavioral Sciences</u>, 1983, 5:379-400.
- Montes-Giraldo, J. J. "Acerca de la apropiacion por el nino del sistema fonologico espanol." Thesaurus, 1971, 26:322-346.
- Myklebust, H. <u>Auditory Disorders in Children:</u>
 <u>A Manual for Differential Diagnosis</u>. New York: Grune & Stratton, 1954.
- Toronto, A. A Developmental Spanish Language Analysis Procedure for Spanish-speaking Children. Unpublished doctoral dissertation, Northwestern University, 1972.
- Toronto, A. "Developmental assessment of Spanish grammar." <u>Journal of Speech and Hearing Disorders</u>, 1976, 41:150-171.
- Tucker, J. A. "Ethnic proportions in classes for the learning disabled: Issues in nonbiased assessment." <u>Journal of Special</u> Education, 1980, 14:93-105.
- Wiig, E. H., and Semel, E. M. <u>Language Disabilities in Children and Adolescents</u>. Columbus, Ohio: Merrill, 1976.
- Wyszewianski-Langdon, H. Determining a Language Disorder in a Bilingual Spanish-English Population. Unpublished doctoral dissertation, Boston University, 1977.

Wyszewianski-Langdon, H. "Assessment and intervention strategies for the bilingual language disordered student." Exceptional Children, 1983, 50:37-46.

"Identification and Referral Proce-Zabel, R. H. Linquistic and Cultural dures: Considerations." Paper presented at the Bilingual Special Education Conference, Evanston. College Ilinois, National of Education, May, 1980.

* * *

About the Author:

Alba N. Ambert was this past year a Visiting Scientist at the Massachusetts Institute of Technology Department of Linguistics performing a study on language development and language Spanish-speaking children. disorders in was the recipient of a National Research Council Fellowship while serving as Assistant Professor and Director of the Bilingual Special Education Teacher Training Program at the University of Hartford in Connecticut. Her most recent publication is Bilingual Education: A Sourcebook, which she co-authored with Sarah Melendez.