

S7: Figures and Tables with Captions

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To facilitate review, in addition to uploading the elements separately in accordance to JSLHR guidelines, we have combined all tables and figures from the main manuscript and supplemental materials in a single pdf alongside their titles and captions.

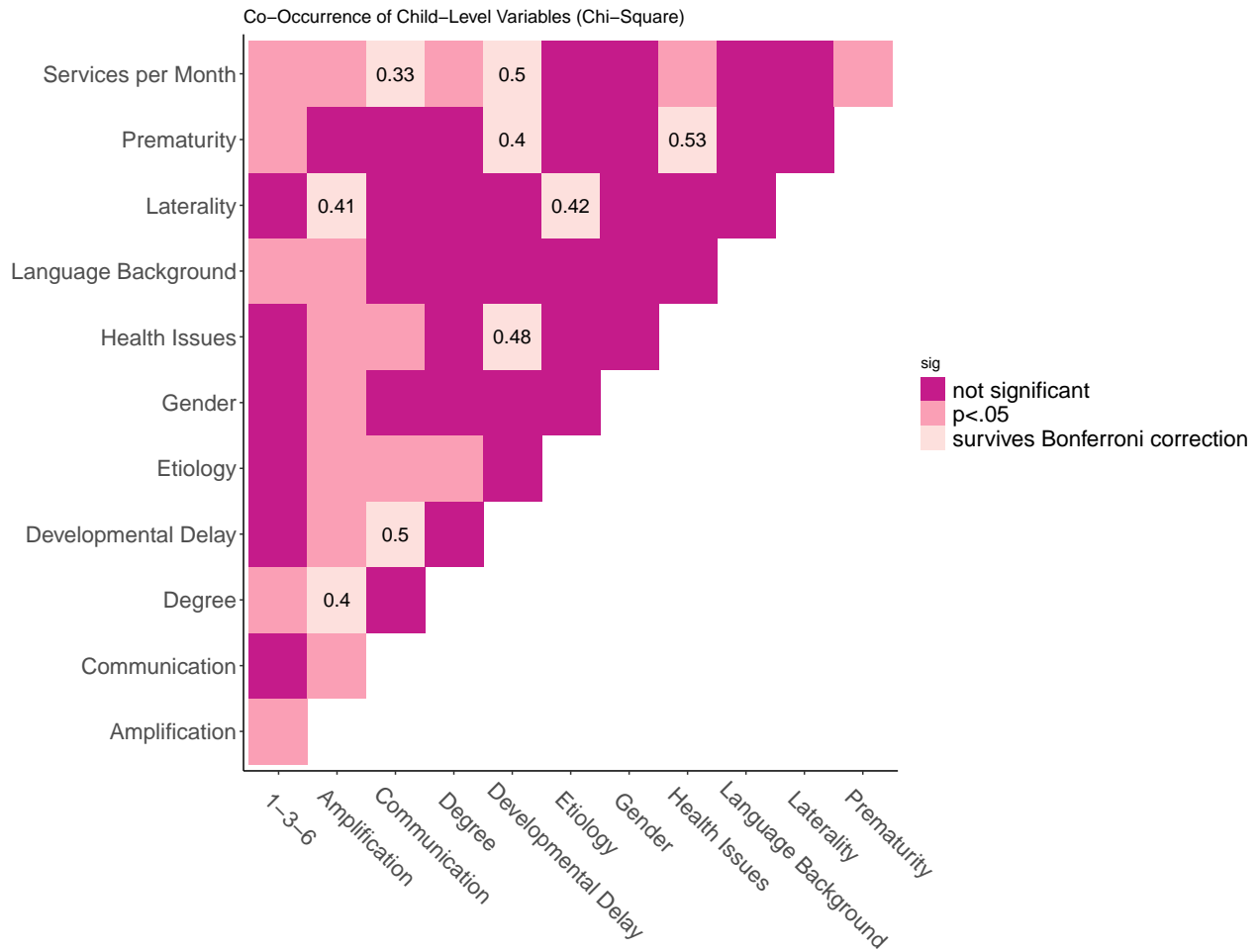


Figure 1: Co-Occurrence of Child-Level Variables (Chi-Square): Results of chi-square tests between variables. X- and y-axes show the variables compared. Color of the square represents significance of the corresponding chi-square test. For tests that survived Bonferroni correction ($p < .0007$), effect size (Cramer's V) is given.

Vocabulary Growth Curves by Instrument

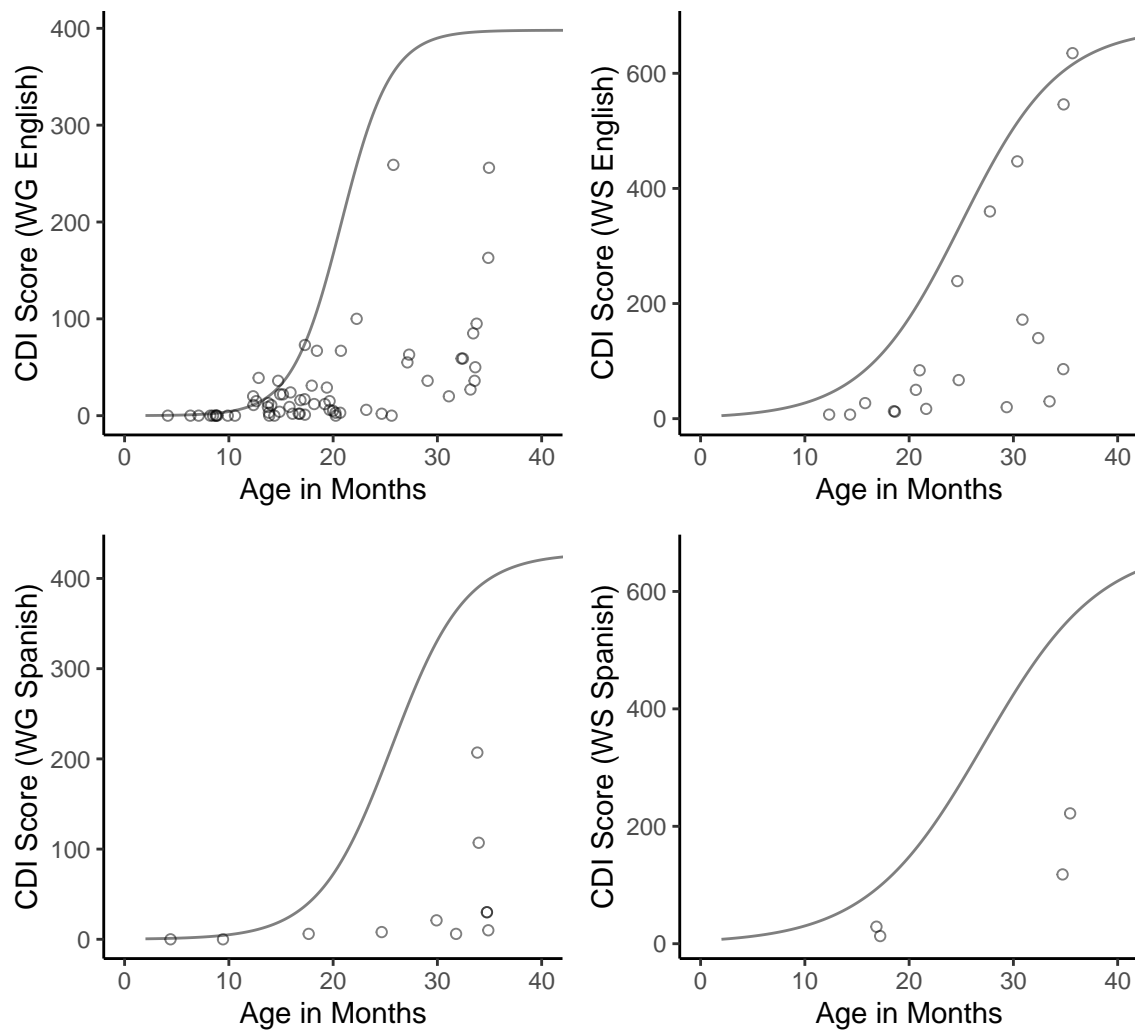


Figure 2: Vocabulary Growth Curves by Instrument: Lines show the growth curves created from WordBank 50th percentile data. Left panels show Words & Gestures; right panels show Words & Sentences. Top row is American English data; bottom row is Mexican Spanish data. Dots represent vocabulary scores of individual DHH children in the sample.

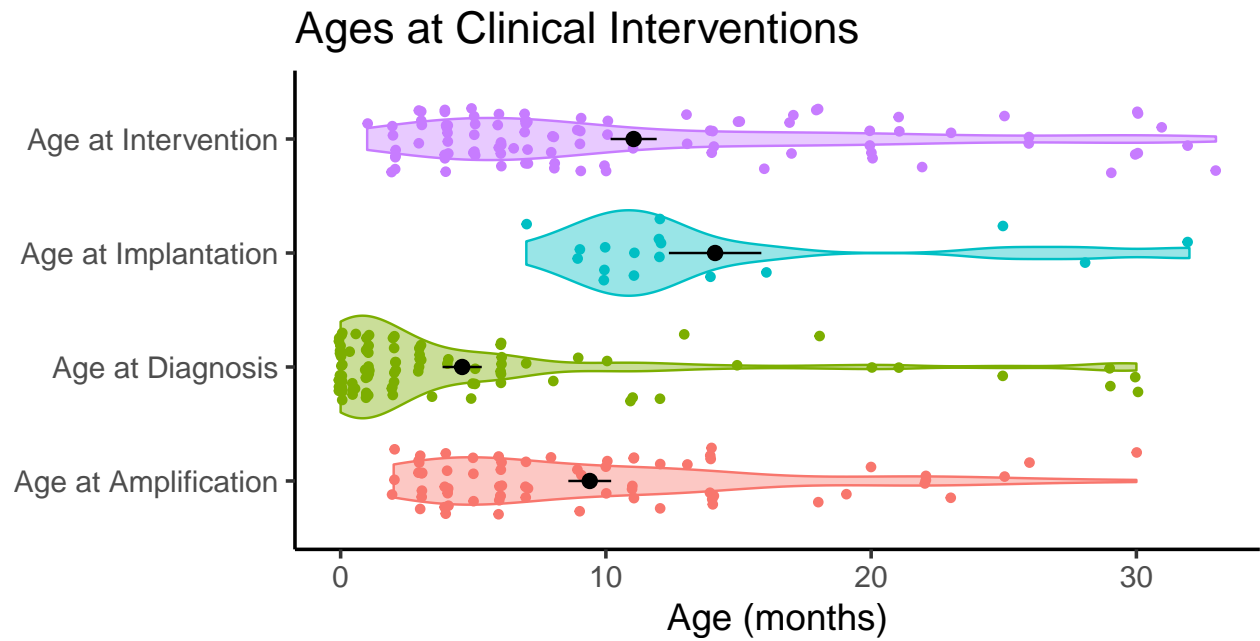


Figure 3: Ages at Clinical Interventions: Age at diagnosis, intervention, amplification, and cochlear implantation across participants. Each dot represents the age that one child received the clinical service; violin width reflects data distribution. Black dots and whiskers show means and standard errors. Not all children received amplification (hearing aids) or implantation (cochlear implants).

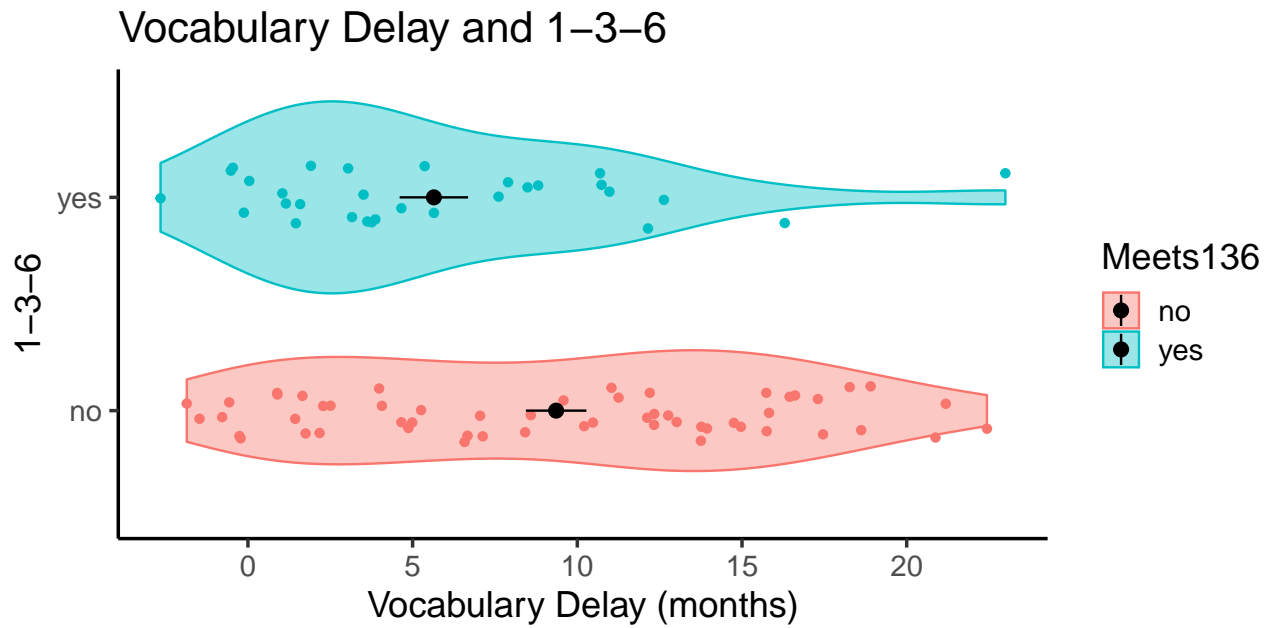


Figure 4: Vocabulary Delay and 1-3-6: Estimated vocabulary delay for children who meet 1-3-6 guidelines for diagnosis/intervention (top) and children who do not (bottom). Each dot represents one child in the sample; violin width reflect data distribution. Black dots and whiskers show means and standard error.

Beta Weights for Vocabulary, Diagnosis, and Intervention Models

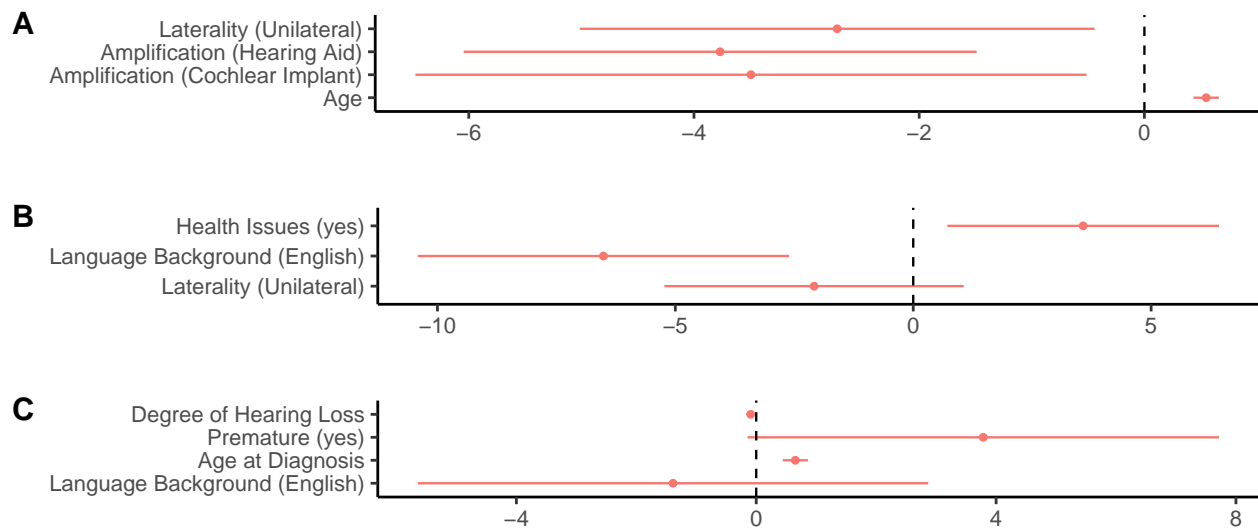


Figure 5: Beta Weights for Vocabulary, Diagnosis, and Intervention Models: Unstandardized coefficients (measured in months) with 95% confidence intervals for the models selected by AIC for: (A) vocabulary delay, (B) age at diagnosis, (C) age at intervention.

Table 1: CDI Ages, Vocabulary Scores and Rate of Developmental Delay: For each version of the CDI (WG = Words and Gestures; WS = Words and Sentences), the table shows the mean(SD) age, comprehension score, and production score of participants in our sample, along with the percent diagnosed with developmental delays.

CDI version	Mean Age (SD)	Mean Comprehension (SD)	Mean Word Production (SD)	% Developmental Delays
WG (n = 74)	20.1 (8.9) months	107 (99) words	32 (53) words	17.6%
WS (n = 24)	25.8 (7.7) months	NA	149 (180) words	4.2%

Table 2: Variables List: Detailed information about the variables studied. For categorical variables, levels are described. For continuous variables, range, mean, and standard deviation are provided.

Variable	Range
Age	4-36 months (mean (SD): 21 (9))
Age at Amplification	2-30 months (mean (SD): 9 (7))
Age at Diagnosis	0-30 months (mean (SD): 5 (7))
Age at Implantation	7-32 months (mean (SD): 14 (7))
Age at Intervention	1-33 months (mean (SD): 11 (9))
Amplification	Hearing Aid (53) / Cochlear Implant (17) / None (27)
Communication	Spoken (78) / Total Communication (18) / Cued Speech (1)
Degree Hearing Loss (worse ear)	18-100 dB HL (mean (SD): 65 (23))
Developmental Delay	Yes (16) / No (81)
Gender	Female (44) / Male (56)
Health Issues	Yes (35) / No (62)
Language in Home	English (84) / Other (16)
Laterality	Unilateral (25) / Bilateral (72)
1-3-6	Yes (35) / No (59)
Premature Birth	Full-term (16) / Premature (81)
Services Per Month	0-43 services per month (mean (SD): 6 (6))
Etiology	Sensorineural (61) / Conductive (18) / Mixed (8)
CDI - Words Produced	0-635 words (mean (SD): 61 (111))

Table S1: Additional Diagnoses (n = 39): Ns of participants in our sample diagnosed with other conditions. N.B.: Ns do not sum to total because many participants had multiple diagnoses.

Condition	Specific Condition	n
Premature		17
	Extremely Premature	11
	NICU stay	16
Health Issues		36
	Heart	9
	Lung	5
	Illness	15
	Feeding Issues	14
	Pregnancy/Birth Complications	11
	Musculoskeletal	9
	Cleft Lip/Palate	4
	Other	15
Developmental Concerns		17
	Down Syndrome	5
	Chromosomal Issues	2
	Neural Tube Defects	2
	Other	10
Vision Loss		5
	Retinopathy of Prematurity	1
	Nearsightedness	1
	Farsightedness	1
	Cortical Visual Impairment	1

Table S2: Audiological Characteristics of the Sample: First two columns describe laterality and amplification type (cochlear implant (CI), hearing aid (HA), or none). Mean decibels of hearing loss (HL) in better ear, worse ear, and the mean age (in months) of amplification, and cochlear implantation (when applicable) for each laterality and amplification combination.

Laterality	Amplification	Degree (better ear; dB HL)	Degree (worse ear; dB HL)	Age of Amplification (months)	Age of Implantation (months)
Bilateral	CI	85.60	89.79	11.29	14.12
Bilateral	HA	47.51	56.28	8.18	NaN
Bilateral	none	49.67	53.65	NaN	NaN
Unilateral	HA	4.70	56.04	10.91	NaN
Unilateral	none	2.50	73.90	8.50	NaN

Table S3: Language and Communication Characteristics of the Sample: Ns of participants by language background and communication method.

Communication	English	Hindi	Spanish	Total
cued speech	1	0	0	1
spoken	67	1	10	78
total communication	15	0	3	18

Table S4: Unstandardized beta weights (months of vocabulary delay) for the model of vocabulary delay selected by AIC.

term	estimate	std.error	statistic	p.value
(Intercept)	-0.63	1.72	-0.36	.717
Laterality (Unilateral)	-2.73	1.15	-2.38	.020
Amplification (Cochlear Implant)	-3.49	1.50	-2.33	.022
Amplification (Hearing Aid)	-3.77	1.14	-3.29	.001
Age (months)	0.55	0.06	9.70	< .001

Table S5: Unstandardized beta weights (months) for the model of diagnosis selected by AIC.

term	estimate	std.error	statistic	p.value
(Intercept)	9.40	1.97	4.76	< .001
Health Issues (yes)	3.57	1.44	2.49	.015
Language Background (English)	-6.51	1.96	-3.31	.001
Laterality (Unilateral)	-2.08	1.58	-1.32	.191

Table S6: Unstandardized beta weights (months) for the model of age at intervention selected by AIC.

term	estimate	std.error	statistic	p.value
(Intercept)	14.65	2.90	5.05	< .001
Degree of Hearing Loss	-0.09	0.03	-2.98	.004
Premature (yes)	3.79	1.97	1.92	.059
Age at Diagnosis	0.65	0.11	6.17	< .001
Language Background (English)	-1.39	2.14	-0.65	.519