TABLE OF CONTENTS

BILINGUAL VERSUS MONOLINGUAL COMPARISONS IN ENGLISH: CHILD RESULTS 79

BILINGUAL VERSUS MONOLINGUAL COMPARISONS IN THAI: MATERNAL RESULTS 101

APPENDIX 1 Task Setups

Prompted Reminiscing

Personal Narrative with Interviewer

Book Sharing

Toy Play

APPENDIX 2 Chapter 2: Prompted Reminiscing

Raw Means

Table 2.1 Maternal Raw Means

Mean Frequencies (Standard Deviations) of Mothers' Language Use During Prompted

Reminiscing

Maternal linguistic measure	Bilingual				Monolingual			
	Language		Child gender		Language		Child gender	
	English	Thai	Boys	Girls	English	Thai	Boys	Girls
Label	6.42	2.54	3.13	5.64	7.71	1.05	2.90	5.86
	(9.88)	(6.13)	(4.35)	(10.64)	(10.34)	(2.27)	(3.86)	(10.77)
Description	18.92	18.85	18.21	19.46	17.81	12.90	17.76	12.95
	(18.29)	(18.41)	(16.40)	(19.85)	(13.00)	(10.41)	(12.52)	(11.01)
Open-ended question	66.19	123.38	106.75	84.54	73.81	120.38	94.81	99.38
	(35.66)	(68.92)	(77.18)	(42.90)	(31.76)	(47.17)	(46.06)	(47.32)
Closed-ended question	80.04	119.73	111.13	90.25	106.57	115.52	113.67	108.43
	(47.67)	(60.30)	(64.76)	(49.49)	(35.90)	(46.27)	(44.42)	(38.53)
Reframe	0.31	0.27	0.33	0.25	1.52	0.67	0.81	1.38
	(0.68)	(0.72)	(0.76)	(0.65)	(1.83)	(0.80)	(1.40)	(1.50)
Affirmation	59.35	60.23	59.13	60.36	26.29	9.90	17.29	18.90
	(45.26)	(42.71)	(43.05)	(44.80)	(15.25)	(15.71)	(18.36)	(16.78)
Repetition	45.04	45.08	45.46	44.71	39.33	38.52	36.81	41.05
	(33.74)	(34.18)	(36.21)	(31.91)	(23.24)	(26.36)	(24.37)	(25.14)

Request for repetition	4.31 (4.28)	5.42 (10.66)	6.38 (11.19)	3.57 (3.51)	2.86 (2.54)	5.38 (4.59)	3.90 (3.33)	4.33 (4.43)
Expansion	1.65 (2.10)	7.31 (6.39)	3.67 (5.39)	5.18 (5.61)	3.24 (3.27)	3.90 (5.92)	3.62 (3.54)	3.52 (5.78)
Extension	0.38 (1.20)	0.31 (0.68)	0.29 (0.69)	0.39 (1.17)	3.71 (3.70)	0.67 (1.24)	2.05 (3.31)	2.33 (3.02)
Recast	1.85 (1.99)	2.54 (2.04)	1.83 (1.76)	2.50 (2.22)	5.62 (3.34)	1.33 (1.65)	3.90 (3.28)	3.05 (3.51)
Direct action request	8.92 (8.06)	15.73 (17.31)	14.92 (16.80)	10.11 (10.41)	14.10 (14.49)	16.00 (8.76)	16.14 (12.31)	13.95 (11.61)
Indirect action request	5.65 (6.48)	3.65 (3.26)	4.83 (6.32)	4.50 (4.08)	5.57 (4.03)	12.10 (8.51)	10.38 (8.88)	7.29 (5.22)
Attention directive	0.35 (0.63)	0.69 (1.62)	0.83 (1.69)	0.25 (0.52)	0.10 (0.30)	0.71 (1.59)	0.67 (1.56)	0.14 (0.48)
Positive feedback	1.04 (1.43)	0.96 (1.61)	1.25 (1.92)	0.79 (1.03)	8.86 (7.32)	3.00 (5.11)	6.52 (7.80)	5.33 (6.00)
Negative feedback	10.27 (7.57)	7.00 (5.02)	9.63 (7.69)	7.79 (5.43)	15.10 (10.80)	7.81 (5.70)	10.62 (9.16)	12.29 (9.57)
Total utterances	288.12 (147.13)	255.27 (117.62)	292.29 (160.46)	254.04 (103.64)	330.43 (106.51)	266.43 (116.61)	290.19 (121.77)	306.67 (110.10)

Total words	1243.85	1968.115	1756.75	1476.75	1847.33	1960.33	1970.05	1837.62
	(707.12)	(874.35)	(1013.33)	(714.97)	(505.83)	(700.58)	(623.25)	(596.43)

Table 2.2 Child Raw Means

Mean Frequencies (Standard Deviations) of Child Language Use During Prompted Reminiscing

Child linguistic measure	Bilingual				Monolingual			
	Language		Child gender		Language		Child gender	
	English	Thai	Boys	Girls	English	Thai	Boys	Girls
Label	5.58	1.57	3.54	3.61	8.33	0.24	3.38	5.19
	(8.79)	(3.50)	(5.27)	(8.18)	(13.49)	(0.70)	(8.78)	(11.75)
Description	19.92	21.65	21.29	20.36	15.52	16.14	14.05	17.62
	(15.21)	(12.01)	(13.33)	(14.05)	(11.89)	(16.74)	(13.22)	(15.51)
Open-ended question	5.88	4.77	5.92	4.82	7.86	7.52	7.48	7.90
	(6.55)	(5.24)	(6.55)	(5.35)	(11.91)	(6.23)	(6.23)	(11.92)
Closed-ended question	5.77	4.23	4.92	5.07	8.67	5.57	7.00	7.24
	(5.10)	(4.35)	(5.00)	(4.63)	(5.86)	(5.84)	(6.14)	(5.98)
Reframe	0.04	0.04	0.04	0.04	0.19	0 (0)	0.10	0.10
	(0.20)	(0.19)	(0.20)	(0.19)	(0.51)		(0.30)	(0.44)
Affirmation	6.73	4.58	6.00	5.36	5.10	3.05	2.05	6.10
	(9.56)	(7.18)	(7.81)	(9.08)	(5.40)	(7.53)	(2.71)	(8.49)
Repetition	11.88	10.88	11.29	11.46	5.90	7.00	5.67	7.24
	(8.34)	(7.01)	(7.69)	(7.75)	(5.00)	(5.71)	(5.69)	(4.96)
Request for repetition	1.65	1.88	2.54	1.11	0.81	0.67	1.10	0.38
	(2.40)	(3.17)	(3.59)	(1.64)	(1.08)	(1.28)	(1.30)	(0.92)

Expansion	0.04	0.19	0.17	0.07	0.14	0.19	0.14	0.19
	(0.20)	(0.40)	(0.38)	(0.26)	(0.36)	(0.40)	(0.36)	(0.40)
Extension	0.08	0.12	0.17	0.04	0.19	0.24	0.19	0.24
	(0.27)	(0.43)	(0.48)	(0.19)	(0.40)	(0.77)	(0.68)	(0.54)
Recast	0 (0)	0.04	0 (0)	0.04	0.14	0 (0)	0.14	0 (0)
		(0.20)		(0.19)	(0.48)		(0.48)	
Direct action request	2.19	0.73	1.88	1.11	3.33	0.52	2.00	1.86
	(3.24)	(0.92)	(3.13)	(1.71)	(4.63)	(0.81)	(2.30)	(4.57)
Indirect action request	0.62	0.12	0.58	1.27	1.90	1.19	1.29	1.81
	(1.27)	(0.43)	(0.43)	(0.18)	(3.16)	(2.20)	(2.26)	(3.14)
Attention directive	1.15	0.85	1.29	0.75	0.33	0.57	0.52	0.38
	(2.19)	(1.46)	(1.94)	(1.76)	(0.66)	(1.25)	(1.08)	(0.92)
Positive feedback	0.04	0 (0)	0 (0)	0.04	0.57	2.43	0.29	2.71
	(0.20)			(0.19)	(2.40)	(7.64)	(0.78)	(7.89)
Negative feedback	3.38	2.19	3.17	2.46	5.24	2.67	3.67	4.24
	(4.16)	(2.28)	(4.33)	(2.30)	(4.74)	(2.65)	(3.58)	(4.47)
Total utterances	198.50	187.96	204.25	183.79	219.52	193.43	193.43	219.52
	(91.56)	(88.72)	(99.50)	(80.44)	(85.58)	(103.63)	(99.23)	(90.64)
Total words	636.62	808.38	721.38	723.46	829.76	916.81	795.05	951.52
	(308.59)	(434.576)	(317.00)	(437.78)	(298.47)	(630.51)	(463.60)	(512.67)

Within Bilingual Comparisons (English Versus Thai): Maternal Results

Table 2A.1 Labels

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Mothers' Use of Labels During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.82	1.13	0.72	.47	
Language	-2.12	0.80	-2.65	.008	**
Child Gender	-0.44	0.61	-0.72	.47	
Words	0.0006	0.0006	1.01	.31	
Language*Child Gender	0.90	0.83	1.08	.28	

Note. Formula: `label ~ lang_thai * gender_male + words + (1 | participant)`.

**p* < .01.

Table 2A.2 Descriptions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Mothers' Use of Descriptions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.74	0.36	4.77	1.9e-06	***
Language	-0.63	0.29	-2.14	.03	*
Child Gender	-0.19	0.28	-0.68	.50	
Words	0.001	0.0003	2.93	.003	**
Language*Child Gender	-0.05	0.28	-0.19	.85	

Note. Formula: `desc ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, ***p* < .01, ****p* < .001.

Table 2A.3 Open-Ended Questions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Open-Ended Questions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.48	0.12	30.05	<2e-16	***
Language	0.20	0.11	1.80	.07	†
Child Gender	-0.01	0.13	-0.11	0.92	
Words	0.0005	0.00006	8.17	3.2e-16	***
Language*Child Gender	0.02	0.16	0.15	0.88	

Note. Formula: `oq ~ lang_thai * gender_male + words + (1 | participant).`

†*p* < .10, ****p* < .001.

Table 2A.4 Closed-Ended Questions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Closed-Ended Questions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.58	0.39	9.12	<2e-16	***
Language	-0.21	0.19	-1.07	.28	
Child Gender	-0.08	0.14	-0.56	.57	
Words	0.0006	0.00007	8.37	<2e-16	***
Exposure	0.004	0.003	1.41	.16	
Proficiency	-0.02	0.05	-0.38	.71	
Language*Child Gender	0.21	0.20	1.05	.29	

Note. Formula: `cq ~ lang_thai * gender_male + words + exposure + proficiency`
`+(1 | participant)`.

***$p < .001$.

Table 2A.5 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Mothers' Use of

Reframes During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.96	1.33	-1.48	.14
Language	0.34	0.87	0.39	.70
Child Gender	-0.63	0.89	0.70	.48
Words	-0.00008	0.0006	-0.14	.89
Language*Child Gender	-0.77	1.09	-0.70	.48

Note. Formula: `reframe ~ lang_thai * gender_male + words + (1 | participant).`

Table 2A.6 Affirmations

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Affirmations During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.57	0.27	13.31	<2e-16	***
Language	-0.11	0.17	-0.64	.52	
Child Gender	0.07	0.30	0.24	.81	
Words	0.0002	0.0002	1.36	.17	
Language*Child Gender	-0.03	0.21	-0.14	.89	

Note. Formula: `aff ~ lang_thai * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 2A.7 Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Repetitions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.95	0.19	15.75	<2e-16	***
Language	-0.37	0.15	2.50	.013	*
Child Gender	-0.14	0.19	-0.72	.47	
Words	0.001	0.0001	5.14	2.7e-07	***
Language*Child Gender	-0.15	0.20	-0.74	.46	

Note. Formula: `rep ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, ****p* < .001.

Table 2A.8 Requests for Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Requests for Repetitions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.35	0.41	0.87	.38	
Language	-0.74	0.38	-1.95	.05	†
Child Gender	-0.07	0.44	-0.17	.87	
Words	0.001	0.0002	2.88	.004	**
Language*Child Gender	0.30	0.52	0.57	.57	

Note. Formula: `reqrep ~ lang_thai * gender_male + words + (1 | participant)`.

†$p < .10$, **$p < .01$.

Table 2A.9 Recasts

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Recasts During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.51	0.36	1.42	.16	
Language	-0.07	0.33	0.21	.84	
Child Gender	-0.50	0.40	-1.26	.21	
Words	0.0003	0.0001	2.37	.02	*
Language*Child Gender	0.10	0.45	0.23	.82	

Note. Formula: `recast ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 2A.10 Expansions

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Expansions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.04	0.38	-0.12	.91	
Language	0.97	0.31	3.14	.002	**
Child Gender	-0.65	0.40	-1.63	.10	
Words	0.001	0.0002	2.30	.02	*
Language*Child Gender	0.08	0.36	0.22	0.83	

Note. Formula: `exp ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, **p* < .01.

Table 2A.11 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Mothers' Use of

Extensions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.87	4.62	-0.19	.85	
Language	0.59	1.27	0.46	.65	
Child Gender	-1.13	1.02	-1.10	.27	
Words	0.0001	0.001	0.07	.94	
Exposure	-0.05	0.02	-2.77	.006	**
Proficiency	0.16	0.40	0.40	.69	
Language*Child Gender	1.24	1.50	0.83	.41	

Note. Formula: `ext ~ lang_thai * gender_male + words + exposure + proficiency`

`+(1 | participant)`.

**p < .01.

Table 2A.12 Direct Action Requests

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Direct Action Requests During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.28	0.85	3.86	.0001	***
Language	0.72	0.34	2.11	.03	*
Child Gender	0.05	0.33	0.14	.89	
Words	0.0005	0.0002	2.78	.005	**
Exposure	-0.01	0.01	-1.66	.10	
Proficiency	-0.24	0.10	-2.32	.02	*
Language*Child Gender	0.47	0.33	1.42	.16	

Note. Formula: `actdird ~ lang_thai * gender_male + words + exposure + proficiency +(1 | participant)`.

p < .05, **p* < .01, ***p* < .001.

Table 2A.13 Indirect Action Requests

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Indirect Action Requests During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.19	0.30	4.00	6.4e-05	***
Language	-0.50	0.35	-1.42	.16	
Child Gender	-0.07	0.36	-0.19	.85	
Words	0.0004	0.0002	2.25	.02	*
Language*Child Gender	-0.22	0.51	-0.43	.67	

Note. Formula: `actdiri ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05, ***p < .001.

Table 2A.14 Attention Directives

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Attention Directives During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.45	0.68	-2.13	.03	*
Language	-0.39	0.89	-0.44	.66	
Child Gender	0.37	0.79	0.47	0.64	
Words	0.0002	0.0003	0.54	.59	
Language*Child Gender	1.29	1.11	1.16	.25	

Note. Formula: `attdir ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 2A.15 Positive Feedback

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Mothers' Use of Positive Feedback During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.34	0.49	0.70	.48	
Language	0.46	0.51	0.90	.37	
Child Gender	0.81	0.44	1.86	.06	†
Words	-0.0002	0.0003	-0.56	.57	
Language*Child Gender	0.26	0.69	0.38	.71	

Note. Formula: `pf ~ lang_thai * gender_male + words + (1 | participant).`

†*p* < .10

Table 2A.16 Negative Feedback

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Negative Feedback During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.44	0.26	5.60	2.1e-08	***
Language	-0.67	0.24	-2.73	.006	**
Child Gender	0.12	0.26	0.46	0.65	
Words	0.001	0.0001	4.02	5.07e-05	***
Language*Child Gender	-0.25	0.33	-0.74	0.46	

Note. Formula: `nf ~ lang_thai * gender_male + words + (1 | participant)`.

**p* < .01, ****p* < .001.

Table 2A.17 Number of Words

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of Words Bilingual Mothers Produced During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	7.75	0.38	20.51	<2e-16	***
Language	0.68	0.13	5.30	1.16e-7	***
Child Gender	-0.02	0.21	-0.09	.93	
Exposure	-0.01	0.002	-2.51	.01	*
Proficiency	-0.08	0.05	-1.64	.10	
Language*Child Gender	0.30	0.14	2.13	.03	*

Note. Formula: `words ~ lang_thai * gender_male + exposure + proficiency + (1 | participant)`.

p < .05, ****p* < .001.

Table 2A.18 Number of Utterances

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of Utterances Bilingual Mothers Produced During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.25	0.41	15.35	<2e-16	***
Language	0.09	0.14	0.66	.51	
Child Gender	0.03	0.19	0.14	.89	
Exposure	-0.004	0.002	-1.88	.06	†
Proficiency	-0.08	0.05	-1.43	.15	
Language*Child Gender	0.21	0.16	1.31	.19	

Note. Formula: `utterances ~ lang_thai * gender_male + exposure + proficiency + (1 | participant)`.

†*p* < .10, ****p* < .001.

Table 2A.19 Estimated Marginal Means

Estimated Marginal Means of Bilingual Mothers' Language Use During Prompted Reminiscing

Maternal linguistic measure	Language	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	4.72	1.95	2.05	10.90	Boys	2.05	1.40	0.52	8.10
	Thai	0.88	0.73	0.17	4.70	Girls	2.04	1.21	0.61	6.77
Description	English	19.30	3.20	13.80	26.90	Boys	12.50	2.26	8.66	18.00
	Thai	10.00	1.91	6.84	14.70	Girls	15.50	2.59	11.07	21.70
Open-ended question	English	73.80	5.08	64.20	84.80	Boys	82.10	6.16	70.60	95.50
	Thai	91.50	6.21	79.90	105.00	Girls	82.30	5.76	71.40	94.70

Closed-ended question	English	93.10	10.02	74.90	116.00	Boys	89.50	6.70	77.00	104.00
	Thai	84.10	8.94	67.80	104.00	Girls	87.40	6.12	75.80	101.00
Reframe	English	0.17	0.10	0.05	0.57	Boys	0.19	0.16	0.03	0.99
	Thai	0.16	0.15	0.03	1.01	Girls	0.15	0.10	0.03	0.61
Affirmation	English	51.80	8.32	37.40	71.50	Boys	50.00	10.18	33.20	75.30
	Thai	45.60	7.16	33.30	62.60	Girls	47.20	9.01	32.20	69.40
Repetition	English	45.90	5.03	36.80	57.30	Boys	33.00	4.11	25.70	42.40
	Thai	29.30	3.12	23.70	36.30	Girls	40.90	4.72	32.40	51.60
Request for repetition	English	4.25	1.04	2.59	6.97	Boys	3.28	0.92	1.87	5.76
	Thai	2.36	0.59	1.43	3.89	Girls	3.05	0.80	1.80	5.17

Expansion	English	1.71	0.35	1.13	2.58	Boys	2.08	0.45	1.35	3.22
	Thai	4.69	0.86	3.24	6.78	Girls	3.84	0.69	2.68	5.50
Extension	English	0.07	0.08	0.01	0.65	Boys	0.10	0.17	0.004	2.63
	Thai	0.25	0.42	0.01	7.76	Girls	0.17	0.17	0.03	1.19
Recast	English	2.19	0.53	1.35	3.55	Boys	1.74	0.36	1.14	2.64
	Thai	2.15	0.38	1.50	3.08	Girls	2.71	0.63	1.70	4.33
Direct action request	English	5.48	1.30	3.39	8.85	Boys	10.14	2.14	6.62	15.50
	Thai	14.19	3.23	8.97	22.44	Girls	7.66	1.54	5.12	11.50
Indirect action request	English	5.83	1.02	4.11	8.28	Boys	3.92	0.74	2.69	5.73
	Thai	3.16	0.58	2.18	4.58	Girls	4.70	0.82	3.31	6.67

Attention directive	English	0.37	0.15	0.16	0.85	Boys	0.70	0.24	0.35	1.39
	Thai	0.48	0.20	0.21	1.09	Girls	0.25	0.11	0.11	0.60
Positive feedback	English	1.78	0.44	0.90	2.67	Boys	3.54	0.78	2.27	5.52
	Thai	3.40	1.20	0.98	5.83	Girls	1.38	0.34	0.84	2.27
Negative feedback	English	11.00	1.55	8.32	14.65	Boys	7.42	1.28	5.24	10.50
	Thai	5.00	0.82	3.59	6.96	Girls	7.44	1.10	5.53	10.00
Total utterances	English	227.00	26.80	179.00	288.00	Boys	268.00	35.40	205.00	350.00
	Thai	277.00	32.50	218.00	350.00	Girls	235.00	28.80	183.00	301.00
Total words	English	937.00	113.00	734.00	1195.00	Boys	1513.00	221.00	1127.00	2032.00
	Thai	2141.00	259.00	1678.00	2732.00	Girls	1325.00	180.00	1009.00	1741.00

Within Bilingual Comparisons (English Versus Thai): Child Results

Table 2A.20 Labels

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual Children's Use of Labels During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.38	0.68	2.03	.04	*
Language	-1.94	0.69	-2.82	.005	**
Child Gender	-0.02	0.55	-0.03	.98	
Words	-0.0001	0.001	-0.20	.84	
Language*Child Gender	1.28	0.83	1.55	.12	

Note. Formula: `label ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, **p* < .01.

Table 2A.21 Descriptions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual Children's Use of Descriptions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.98	0.55	5.44	5.37e-8	***
Language	0.02	0.19	0.13	.90	
Child Gender	0.06	0.24	0.23	.82	
Words	0.001	0.0003	4.28	1.91e-5	***
Exposure	-0.01	0.005	-2.11	.04	*
Proficiency	-0.05	0.08	-0.65	.52	
Language*Child Gender	-0.03	0.27	-0.12	.90	

Note. Formula: `desc ~ lang_thai * gender_male + words + exposure + proficiency + (1 | participant)`.

p < .05, ****p* < .001.

Table 2A.22 Open-Ended Questions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Open-Ended Questions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.06	0.44	2.44	.01	*
Language	-0.56	0.36	-1.58	.11	
Child Gender	-0.16	0.43	-0.37	.71	
Words	0.001	0.001	1.66	.10	
Language*Child Gender	0.59	0.52	1.15	.25	

Note. Formula: `oq ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 2A.23 Closed-Ended Questions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Children's Use of Closed-Ended Questions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.15	0.33	3.45	.001	**
Language	-0.53	0.25	-2.14	.03	*
Child Gender	-0.15	0.33	-0.45	.65	
Words	0.001	0.0004	2.09	.04	*
Language*Child Gender	0.28	0.39	0.71	.48	

Note. Formula: `cq ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, **p* < .01.

Table 2A.24 Reframes

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Reframes During Prompted Reminiscing

Predictors	Estimate	SE	z	p
Intercept	-4.47	3.28	-1.37	.17
Language	-6.85	29.15	-0.24	.81
Child Gender	-7.74	50.23	-0.15	.88
Words	0.001	0.002	0.32	.75
Language*Child Gender	14.71	58.07	0.25	.80

Note. Formula: `reframe ~ lang_thai * gender_male + words + (1 | participant)`.

Table 2A.25 Affirmations

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Children's Use of Affirmations During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.89	0.97	2.98	.003	**
Language	-0.79	0.27	-2.94	.003	**
Child Gender	-0.05	0.45	-0.12	.90	
Words	0.001	0.001	2.31	.02	*
Exposure	-0.01	0.007	-1.73	.08	†
Proficiency	-0.26	0.12	-2.21	.03	*
Language*Child Gender	1.01	0.34	2.94	.003	**

Note. Formula: `aff ~ lang_thai * gender_male + words + exposure + proficiency`

`+(1 | participant).`

†*p* < .10, **p* < .05, ***p* < .01.

Table 2A.26 Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Repetitions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.01	0.25	7.87	3.49e-15	***
Language	-0.22	0.21	-1.02	.31	
Child Gender	-0.01	0.26	-0.04	.97	
Words	0.001	0.0003	2.03	.04	*
Language*Child Gender	0.07	0.30	0.22	.83	

Note. Formula: `rep ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, ****p* < .001.

Table 2A.27 Requests for Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Requests for Repetitions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.10	0.62	-0.15	.88	
Language	-0.92	0.52	-1.77	.08	†
Child Gender	0.07	0.06	0.11	.92	
Words	0.0001	0.001	0.12	.90	
Language*Child Gender	1.56	0.66	2.35	.02	*

Note. Formula: `reqrep ~ lang_thai * gender_male + words + (1 | participant)`.

†*p* < .10, **p* < .05.

Table 2A.28 Recasts

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Recasts During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-14.05	126.00	-0.11	.91
Language	9.60	125.90	0.08	.94
Child Gender	-6.29	3781.00	-0.002	.99
Words	0.0003	0.003	0.09	.93
Language*Child Gender	-4.08	3789.00	-0.001	.99

Note. Formula: `recast ~ lang_thai * gender_male + words + (1 | participant).`

Table 2A.29 Expansions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Expansions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-10.10	116.70	-0.09	.93
Language	10.37	116.70	0.09	.93
Child Gender	9.70	116.70	0.08	.93
Words	0.0004	0.0008	0.54	.59
Exposure	0.01	0.03	-0.45	.65
Proficiency	-0.24	0.40	-0.60	.55
Language*Child Gender	-9.32	116.70	-0.08	.94

Note. Formula: `exp ~ lang_thai * gender_male + words + exposure + proficiency`

`+ (1 | participant).`

Table 2A.30 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Children's Use of

Extensions During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-2.59	1.70	-1.53	.13
Language	-19.86	21860.00	-0.001	.99
Child Gender	0.19	1.50	0.13	.90
Words	-0.0009	0.002	-0.50	.62
Language*Child Gender	21.03	21860.00	0.001	.99

Note. Formula: `ext ~ lang_thai * gender_male + words + (1 | participant)`.

Table 2A.31 Direct Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Children's Use of Direct Action Requests During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.16	1.37	0.12	.90	
Language	-1.40	0.48	-2.94	.003	**
Child Gender	0.30	0.54	0.56	.58	
Words	0.001	0.001	1.99	.05	†
Exposure	0.03	0.01	2.18	.03	*
Proficiency	-0.32	0.20	-1.56	.12	
Language*Child Gender	0.26	0.58	0.45	.65	

Note. Formula: `actdird ~ lang_thai * gender_male + words + exposure + proficiency +(1 | participant)`.

†*p* < .10, **p* < .05, ***p* < .01.

Table 2A.32 Indirect Action Requests

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Indirect Action Requests During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.83	1.20	-1.53	.13	
Language	-0.08	1.16	-0.07	.94	
Child Gender	1.81	0.70	2.59	.01	*
Words	0.001	0.001	1.45	.15	
Language*Child Gender	-2.53	1.57	-1.61	.11	

Note. Formula: `actdiri ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 2A.33 Attention Directives

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Attention Directives During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.04	1.17	-0.03	.97	
Language	-1.72	0.69	-2.51	.01	*
Child Gender	0.23	0.61	0.38	.70	
Words	0.001	0.001	1.20	.23	
Language*Child Gender	1.36	0.85	1.60	.11	

Note. Formula: `attdir ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 2A.34 Positive Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Children's Use of Positive Feedback During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-5.90	4.80	-1.23	.22
Language	-11.75	161.30	-0.07	.94
Child Gender	-9.90	182.20	-0.05	.96
Words	0.003	0.003	0.99	.32
Language*Child Gender	0.04	39460.00	0.00	1.00

Note. Formula: `pf ~ lang_thai * gender_male + words + (1 | participant).`

Table 2A.35 Negative Feedback

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual Children's Use of Negative Feedback During Prompted Reminiscing

Predictors	Estimate	SE	z	p	
Intercept	0.58	0.43	1.36	.17	
Language	-0.59	0.28	-2.13	.03	*
Child Gender	0.55	0.36	1.53	.13	
Words	0.001	0.0004	2.02	.04	*
Language*Child Gender	-0.28	0.43	-0.65	.51	

Note. Formula: `nf ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 2A.36 Number of Words

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of

Words Bilingual Children Produced During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.34	0.14	45.98	<2e-16	***
Language	0.25	0.13	2.00	.05	†
Child Gender	0.10	0.20	0.50	.62	
Language*Child Gender	-0.05	0.18	-0.29	.77	

Note. Formula: `words ~ lang_thai * gender_male + (1 | participant).`

†*p* < .10, ****p* < .001.

Table 2A.37 Number of Utterances

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of Utterances Bilingual Children Produced During Prompted Reminiscing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	5.92	0.34	17.30	<2e-16	***
Language	-0.03	0.09	-0.32	.75	
Child Gender	0.04	0.19	0.21	.84	
Exposure	0.0002	0.003	0.08	.94	
Proficiency	-0.10	0.05	-2.05	.04	*
Language*Child Gender	0.01	0.13	0.10	.92	

Note. Formula: `utterances ~ lang_thai * gender_male + exposure + proficiency + (1 | participant)`.

p < .05, ****p* < .001.

Table 2A.38 Estimated Marginal Means

Estimated Marginal Means of Bilingual Children's Language Use During Prompted Reminiscing

Child linguistic measure	Language	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	3.53	1.29	1.69	7.37	Boys	2.52	1.12	1.03	6.18
	Thai	0.97	0.53	0.32	2.90	Girls	1.35	0.74	0.45	4.05
Description	English	18.10	2.25	14.10	23.20	Boys	18.50	2.70	13.80	24.80
	Thai	18.20	2.23	14.20	23.30	Girls	17.80	2.44	13.50	23.50
Open-ended question	English	4.88	1.12	3.08	7.73	Boys	4.58	1.25	2.64	7.94
	Thai	3.73	0.87	2.33	5.97	Girls	3.98	0.98	2.43	6.53

Closed-ended question	English	5.18	0.96	3.56	7.52	Boys	4.23	1.11	2.50	7.18
	Thai	3.50	0.72	2.31	5.29	Girls	4.28	0.86	2.86	6.40
Reframe	English	0.0004	0.01	2.22e-16	4.69e+18	Boys	0.0004	0.01	2.22e-16	5.04e+18
	Thai	0.001	0.01	2.22e-16	5.37e+09	Girls	0.001	0.01	2.22e-16	5.13e+09
Affirmation	English	3.62	0.91	2.18	6.02	Boys	3.94	1.26	2.06	7.53
	Thai	2.73	0.67	1.66	4.48	Girls	2.51	0.78	1.34	4.71
Repetition	English	11.35	1.55	8.63	14.90	Boys	10.50	1.68	7.58	14.50
	Thai	9.45	1.30	7.17	12.50	Girls	10.20	1.55	7.56	13.90
Request for repetition	English	1.00	0.40	0.45	2.22	Boys	1.43	0.63	0.59	3.45
	Thai	0.87	0.33	0.40	1.89	Girls	0.61	0.63	0.24	1.53

Expansion	English	0.001	0.03	0.00	7.41e+47	Boys	0.13	0.08	0.04	0.00
	Thai	0.18	0.09	0.06	1.00	Girls	0.001	0.05	0.00	1.03e+48
Extension	English	0.04	0.05	0.004	0	Boys	0.09	0.09	0.01	1.00
	Thai	3.77e-06	0.04	0.00	Inf	Girls	1.92e-06	0.02	0.00	Inf
Recast	English	4.09e-08	7.74e-05	2.22e-16	Inf	Boys	2.78e-08	5.27e-05	2.22e-16	Inf
	Thai	7.88e-05	9.27e-03	2.22e-16	5.42e+98	Girls	1.16e-04	7.31e-03	2.22e-16	1.82e+51
Direct action request	English	1.26	0.39	0.68	2.34	Boys	0.83	0.34	0.37	1.88
	Thai	0.36	0.13	0.17	0.75	Girls	0.54	0.22	0.24	1.21
Indirect action request	English	0.98	0.48	0.37	2.62	Boys	0.66	0.43	0.18	2.43
	Thai	0.26	0.22	0.05	1.44	Girls	0.38	0.27	0.09	1.55

Attention directive	English	2.39	1.13	0.93	6.17	Boys	2.25	0.96	0.95	5.29
	Thai	0.85	0.51	0.25	2.86	Girls	0.90	0.60	0.24	3.41
Positive feedback	English	2.08e-04	0.02	2.22e-16	9.22e+75	Boys	4.21e-09	0.0001	2.22e-16	Inf
	Thai	1.66e-09	3.28e-05	2.22e-16	Inf	Girls	8.23e-05	0.01	2.22e-16	2.94e+66
Negative feedback	English	4.24	1.01	2.62	6.85	Boys	3.62	0.98	2.09	6.26
	Thai	2.05	0.46	1.31	3.21	Girls	2.40	0.57	1.49	3.86
Total utterances	English	181.00	17.20	149.00	219.00	Boys	183.00	23.80	140.00	238.00
	Thai	176.00	16.80	146.00	214.00	Girls	174.00	21.00	137.00	222.00
Total words	English	596.00	60.50	486.00	731.00	Boys	691.00	91.50	530.00	902.00
	Thai	745.00	75.70	607.00	914.00	Girls	642.00	79.00	502.00	823.00

Bilingual Versus Monolingual Comparisons in English: Maternal Results

Table 2B.1 Labels

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Labels During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	8.92	2.03	4.39	0.00001	***
Group	-2.06	1.04	-1.97	.05	†
Child Gender	-0.78	0.44	-1.78	.07	†
Words	0.001	0.0002	4.17	0.00003	***
Exposure	-0.004	0.01	-0.33	.74	
Proficiency	-0.84	0.19	-4.55	0.000005	***
Group*Child Gender	-0.58	0.65	-0.89	.37	

Note. Formula: `label ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, ****p* < .001.

Table 2B.2 Descriptions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Descriptions During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.99	1.04	1.91	.06	†
Group	0.65	0.36	1.83	.07	†
Child Gender	0.46	0.29	1.56	.12	
Words	0.001	0.0002	5.50	3.72e-8	***
Proficiency	-0.11	0.11	-1.06	.29	
Group*Child Gender	-0.89	0.39	-2.27	.02	*

Note. Formula: `desc ~ group_biling * gender_male + words + proficiency +`

`(1 | participant).`

†*p* < .10, **p* < .05, ****p* < .001.

Table 2B.3 Open-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Open-Ended Questions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.68	0.70	3.80	.0001	***
Group	0.71	0.34	2.12	.03	*
Child Gender	-0.05	0.16	-0.34	.73	
Words	0.0006	0.0001	6.47	9.94e-11	***
Exposure	0.10	0.004	2.42	.02	*
Proficiency	-0.05	0.004	-0.90	.37	
Group*Child Gender	0.03	0.21	0.14	.89	

Note. Formula: `oq ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

p < .05, ****p* < .001.

Table 2B.4 Closed-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Closed-Ended Questions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.63	0.71	5.10	3.45e-7	***
Group	0.07	0.34	0.20	.84	
Child Gender	0.12	0.16	0.77	.44	
Words	0.0006	0.00009	7.48	7.24e-14	***
Exposure	0.002	0.004	0.37	.71	
Proficiency	-0.04	0.06	-0.75	.45	
Group*Child Gender	-0.21	0.21	-1.01	.31	

Note. Formula: `cq ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

***$p < .001$.

Table 2B.5 Reframes

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Reframes During Prompted Reminiscing (English

Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.02	3.11	-0.65	.52	
Group	-1.13	0.95	-1.19	.23	
Child Gender	0.04	0.47	0.08	.94	
Words	0.001	0.001	2.31	.02	*
Proficiency	0.01	0.26	0.02	.98	
Group*Child Gender	1.06	1.02	1.03	.30	

Note. Formula: `reframe ~ group_biling * gender_male + words + proficiency +`

`(1 | participant).`

*p < .05.

Table 2B.6 Affirmations

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Affirmations During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.62	1.31	2.00	.05	†
Group	0.93	0.63	1.48	.14	
Child Gender	0.02	0.29	0.08	.94	
Words	0.0005	0.0002	2.22	.03	*
Exposure	-0.004	0.008	-0.45	.65	
Proficiency	0.01	0.10	0.14	.89	
Group*Child Gender	-0.09	0.37	-0.23	.82	

Note. Formula: `aff ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, **p* < .05.

Table 2B.7 Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Repetitions During Prompted Reminiscing (English Session)

Predictors	Estimate	SE	z	p	
Intercept	1.18	1.02	1.16	.25	
Group	1.28	0.49	2.62	.01	*
Child Gender	-0.24	0.23	-1.02	.31	
Words	0.001	0.0001	6.96	3.46e-12	***
Exposure	0.01	0.01	2.13	.03	*
Proficiency	-0.05	0.08	-0.62	.54	
Group*Child Gender	-0.004	0.31	-0.01	.99	

Note. Formula: `rep ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

p < .05, ***p* < .001.

Table 2B.8 Requests for Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Requests for Repetitions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.54	1.71	-0.32	.75	
Group	0.79	0.87	0.91	.36	
Child Gender	0.04	0.41	0.09	.93	
Words	0.001	0.0004	2.00	.05	†
Exposure	-0.002	0.01	-0.17	.87	
Proficiency	-0.004	0.15	-0.03	.98	
Group*Child Gender	-0.18	0.52	-0.34	.73	

Note. Formula: `reqrep ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10.

Table 2B.9 Recasts

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Recasts During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	0.63	1.95	0.32	.75
Group	-0.20	0.93	-0.22	.83
Child Gender	-0.02	0.34	-0.06	.96
Words	0.0003	0.0002	1.42	.16
Exposure	0.01	0.01	1.03	.30
Proficiency	-0.08	0.15	-0.51	.61
Group*Child Gender	-0.30	0.51	-0.59	.56

Note. Formula: `recast ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10.

Table 2B.10 Expansions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Expansions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.80	2.54	-0.71	.48
Group	0.85	1.18	0.72	.47
Child Gender	0.22	0.51	0.44	.66
Words	0.001	0.0004	1.40	.16
Exposure	0.01	0.02	0.85	.40
Proficiency	0.02	0.21	0.11	.91
Group*Child Gender	-0.71	0.71	-0.99	.32

Note. Formula: `exp ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

Table 2B.11 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Extensions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	10.71	5.40	1.99	.05	†
Group	-9.98	3.70	-2.70	.007	**
Child Gender	-0.62	0.35	-1.77	.08	†
Words	0.001	0.0003	3.65	.0003	***
Exposure	-0.12	0.05	-2.52	.01	*
Proficiency	0.08	0.24	0.34	.74	
Group*Child Gender	-1.27	0.94	-1.35	.18	

Note. Formula: `ext ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, *p < .05, **p < .01, ***p < .001.

Table 2B.12 Direct Action Requests

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Direct Action Requests During Prompted

Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	5.41	1.34	4.04	.00005	***
Group	-1.19	0.47	-2.51	.01	*
Child Gender	-0.36	0.38	-0.95	.34	
Words	0.001	0.0002	2.75	.006	**
Proficiency	-0.40	0.14	-2.87	.004	**
Group*Child Gender	0.41	0.50	0.81	.42	

Note. Formula: `actdird ~ group_biling * gender_male + words + proficiency +`

`(1 | participant)`.

p < .05, ***p* < .01, ****p* < .001.

Table 2B.13 Indirect Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Indirect Action Requests During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.05	1.71	0.03	.97	
Group	0.17	0.83	0.20	.84	
Child Gender	-0.22	0.38	-0.57	.57	
Words	0.001	0.0002	3.14	.002	**
Exposure	-0.002	0.01	-0.23	.82	
Proficiency	0.06	0.14	0.41	.68	
Group*Child Gender	0.18	0.51	0.36	.72	

Note. Formula: `actdiri ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

**$p < .01$.

Table 2B.14 Attention Directives

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Attention Directives During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	0.59	3.43	0.17	.86
Group	0.27	1.45	0.19	.85
Child Gender	-7.31	40.21	-0.18	.86
Words	-0.0005	0.001	-0.70	.49
Proficiency	-0.20	-0.31	-0.66	.51
Group*Child Gender	7.61	40.32	0.19	.85

Note. Formula: `attdir ~ group_biling * gender_male + words + proficiency +`

`(1 | participant).`

Table 2B.15 Positive Feedback

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Positive Feedback During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.28	2.60	1.26	.21	
Group	-2.29	1.15	-2.00	.05	†
Child Gender	0.36	0.43	0.84	.40	
Words	0.0002	0.0004	0.48	.63	
Exposure	0.006	0.01	0.42	.68	
Proficiency	-0.25	0.21	-1.18	.24	
Group*Child Gender	0.11	0.69	0.16	.88	

Note. Formula: `pf ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

†*p* < .10.

Table 2B.16 Negative Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Negative Feedback During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.57	1.32	1.19	.24	
Group	0.13	0.63	0.21	.83	
Child Gender	-0.49	0.30	-1.65	.10	
Words	0.001	0.0002	4.68	.000003	***
Exposure	0.01	0.01	1.21	.23	
Proficiency	-0.14	0.11	-1.30	.19	
Group*Child Gender	0.55	0.40	1.38	.17	

Note. Formula: `nf ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant).`

***$p < .001$.

Table 2B.17 Number of Words

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of Words Bilingual and Monolingual Mothers Produced During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	7.60	0.87	8.74	<2e-16	***
Group	-0.65	0.41	-1.56	.11	
Child Gender	0.06	0.20	0.27	.79	
Exposure	-0.005	0.01	-0.89	.37	
Proficiency	0.04	0.07	0.54	.59	
Group*Child Gender	0.08	0.27	0.32	.75	

Note. Formula: `words ~ group_biling * gender_male + exposure + proficiency + (1 | participant).`

***$p < .001$.

Table 2B.18 Number of Utterances

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of

Utterances Bilingual and Monolingual Mothers Produced During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	5.59	0.81	6.86	6.78e-12	***
Group	-0.27	0.39	-0.70	.49	
Child Gender	-0.002	0.19	-0.01	.99	
Exposure	-0.003	0.005	-0.61	.55	
Proficiency	0.05	0.07	0.83	.41	
Group*Child Gender	0.14	0.26	0.53	.60	

Note. Formula: `utterances ~ group_biling * gender_male + exposure +`

`proficiency + (1 | participant).`

***$p < .001$.

Table 2B.19 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Maternal Linguistic Measures During Prompted Reminiscing in English Session

Maternal linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	17.98	10.33	5.60	57.71	Boys	3.27	1.01	1.74	6.13
	Bilingual	1.73	0.95	0.57	5.27	Girls	9.49	2.01	6.18	14.59
Description	Monolingual	12.60	2.87	7.96	20.00	Boys	14.10	2.16	10.40	19.30
	Bilingual	15.60	2.71	10.96	22.20	Girls	13.90	2.25	10.00	19.40
Open-ended question	Monolingual	40.80	8.02	27.40	60.80	Boys	57.60	4.67	48.90	67.90
	Bilingual	84.50	12.39	62.80	113.70	Girls	59.90	4.59	51.30	70.00

Closed-ended question	Monolingual	82.40	16.30	55.20	123.00	Boys	81.50	6.57	69.20	96.00
	Bilingual	79.40	11.90	58.70	108.00	Girls	80.30	6.17	68.70	93.80
Reframe	Monolingual	1.14	0.80	0.28	4.70	Boys	1.12	0.66	0.34	3.72
	Bilingual	0.63	0.31	0.23	1.71	Girls	0.64	0.28	0.26	1.54
Affirmation	Monolingual	24.20	9.63	10.80	54.30	Boys	37.30	6.15	26.70	52.10
	Bilingual	58.70	15.63	34.20	100.70	Girls	38.10	5.51	28.40	51.10
Repetition	Monolingual	16.10	4.61	9.02	28.70	Boys	27.10	3.25	21.20	34.50
	Bilingual	57.80	12.30	37.58	89.00	Girls	34.40	3.84	27.40	43.10
Request for repetition	Monolingual	1.77	0.94	0.60	5.22	Boys	2.44	0.70	1.37	4.35
	Bilingual	3.55	1.40	1.60	7.89	Girls	2.58	0.60	1.61	4.11

Expansion	Monolingual	1.06	0.77	0.24	4.63	Boys	1.27	0.41	0.66	2.45
	Bilingual	1.75	0.88	0.63	4.86	Girls	1.45	0.43	0.80	2.64
Extension	Monolingual	161.00	292.00	4.03	6407.48	Boys	0.43	0.19	0.17	1.06
	Bilingual	0.004	0.01	0.0001	0.20	Girls	1.49	0.38	0.89	2.50
Recast	Monolingual	3.49	1.88	1.18	10.37	Boys	2.69	0.55	1.77	4.08
	Bilingual	2.45	1.00	1.08	5.59	Girls	3.19	0.60	2.17	4.68
Direct action request	Monolingual	17.14	4.78	9.73	30.19	Boys	9.70	1.94	6.47	14.50
	Bilingual	6.41	1.35	4.18	9.84	Girls	11.30	1.93	8.02	16.00
Indirect action request	Monolingual	3.54	1.75	1.30	9.65	Boys	3.78	0.79	2.48	5.77
	Bilingual	4.58	1.65	2.21	9.51	Girls	4.29	0.82	2.91	6.33

Attention directive	Monolingual	0.005	0.09	0.00	2.66e+15	Boys	0.01	0.12	0.00	3.48e+15
	Bilingual	0.27	0.25	0.04	2.00	Girls	0.20	0.18	0.03	1.00
Positive feedback	Monolingual	8.61	5.92	2.14	34.74	Boys	3.47	0.90	2.05	5.86
	Bilingual	0.92	0.52	0.29	2.88	Girls	2.29	0.58	1.36	3.83
Negative feedback	Monolingual	7.31	2.74	3.42	15.60	Boys	8.05	1.28	5.83	11.10
	Bilingual	10.97	3.01	6.30	19.10	Girls	9.97	1.47	7.39	13.40
Total utterances	Monolingual	345.00	79.20	217.00	549.00	Boys	322.00	31.10	264.00	391.00
	Bilingual	281.00	48.70	197.00	399.00	Girls	301.00	27.80	250.00	363.00
Total words	Monolingual	2082.00	503.00	1277.00	3395.00	Boys	1616.00	163.00	1318.00	1982.00
	Bilingual	1138.00	208.00	787.00	1647.00	Girls	1466.00	142.00	1205.00	1785.00

Bilingual Versus Monolingual Comparisons in English: Child Results

Table 2B.20 Labels

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Labels During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	5.69	3.41	1.67	.09	†
Group	-1.82	1.82	-1.00	.32	
Child Gender	-0.88	0.82	-1.07	.29	
Words	0.001	0.001	1.46	.14	
Exposure	-0.03	0.03	-0.96	.34	
Proficiency	-0.17	0.29	-0.59	.56	
Group*Child Gender	0.14	1.06	0.14	.89	

Note. Formula: `label ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10.

Table 2B.21 Descriptions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Descriptions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	4.60	0.97	4.76	.000002	***
Group	-0.95	0.52	-1.80	.07	†
Child Gender	-0.27	0.29	-0.93	.35	
Words	0.001	0.0003	4.21	.00003	***
Exposure	-0.02	0.01	-2.63	.009	**
Proficiency	-0.06	0.09	-0.63	.53	
Group*Child Gender	0.26	0.38	0.68	.50	

Note. Formula: `desc ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, ***p* < .01, ****p* < .001.

Table 2B.22 Open-Ended Questions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Open-Ended Questions During Prompted Reminiscing (English Session)

Predictors	Estimate	SE	z	p	
Intercept	-2.41	1.67	-1.45	.15	
Group	1.18	0.67	1.75	.08	†
Child Gender	-0.50	0.41	-1.24	.22	
Words	0.002	0.001	2.99	.003	**
Exposure	0.02	0.01	2.07	.04	*
Proficiency	0.05	0.14	0.40	.69	
Group*Child Gender	0.44	0.55	0.80	.42	

Note. Formula: `oq ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant).`

†*p* < .10, *p* < .05, **p** < .01.

Table 2B.23 Closed-Ended Questions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Closed-Ended Questions During Prompted

Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.53	1.10	-0.49	.63	
Group	0.78	0.51	1.55	.12	
Child Gender	-0.01	0.27	-0.02	.98	
Words	0.001	0.0003	4.14	.00004	***
Exposure	0.02	0.01	2.06	.04	*
Proficiency	-0.02	0.09	-0.25	.80	
Group*Child Gender	-0.08	0.37	-0.23	.82	

Note. Formula: `cq ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

p < .05, ***p* < .001.

Table 2B.24 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Reframes During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-4.95	3.16	-1.56	.12
Group	-0.54	1.58	-0.34	.73
Child Gender	-0.22	1.40	0.16	.87
Words	0.002	0.002	1.15	.25
Group*Child Gender	-19.81	22630.00	-0.001	.99

Note. Formula: `reframe ~ group_biling * gender_male + words +`

`(1 | participant).`

Table 2B.25 Affirmations

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Affirmations During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.68	1.28	1.32	.19	
Group	-0.37	0.64	-0.58	.56	
Child Gender	-1.07	0.38	-2.80	.005	**
Words	0.002	0.0004	5.86	4.73e-9	***
Exposure	-0.005	0.01	-0.44	.66	
Proficiency	-0.15	0.12	-1.26	.21	
Group*Child Gender	1.12	0.48	2.35	.02	*

Note. Formula: `aff ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

p < .05, **p* < .01, ***p* < .001.

Table 2B.26 Repetitions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Repetitions During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.28	1.00	1.28	.20	
Group	0.57	0.52	1.10	.27	
Child Gender	-0.29	0.37	-0.77	.44	
Words	0.001	0.0002	3.54	.0004	***
Exposure	-0.003	0.01	-0.38	.70	
Proficiency	0.03	0.10	0.31	.76	
Group*Child Gender	0.26	0.43	0.60	.55	

Note. Formula: `rep ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

***$p < .001$.

Table 2B.27 Requests for Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Requests for Repetitions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-0.66	0.88	-0.75	.45
Group	0.80	0.67	1.19	.24
Child Gender	0.40	0.71	.57	.57
Words	-0.0003	0.001	-0.34	.74
Group*Child Gender	-0.38	0.90	-0.42	.67

Note. Formula: `reqrep ~ group_biling * gender_male + words +`

`(1 | participant).`

Table 2B.28 Recasts

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Recasts During Prompted Reminiscing (English

Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-13.71	145.90	-0.09	.93
Group	-6.20	3250.00	-0.002	.99
Child Gender	10.70	145.90	0.07	.94
Words	0.002	0.002	1.20	.23
Group*Child Gender	-3.32	3250.00	-0.001	.99

Note. Formula: `recast ~ group_biling * gender_male + words +`

`(1 | participant).`

Table 2B.29 Expansions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Expansions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	7.11	12.19	0.58	.56
Group	-20.70	5502.00	-0.004	.99
Child Gender	-2.25	1.86	-1.21	.23
Words	0.0009	0.002	0.58	.56
Exposure	-0.01	0.11	-0.10	.16
Proficiency	-1.00	0.70	-1.41	.16
Group*Child Gender	20.05	5502.00	0.004	.99

Note. Formula: `exp ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant).`

Table 2B.30 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Extensions During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-3.07	1.25	-2.45	.01	*
Group	-1.08	1.16	-0.93	.35	
Child Gender	-1.12	1.15	-0.97	.33	
Words	0.002	0.001	2.12	.03	*
Group*Child Gender	1.38	1.84	0.75	.45	

Note. Formula: `ext ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05.

Table 2B.31 Direct Action Requests

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Direct Action Requests During Prompted

Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.68	1.83	.37	.71	
Group	-0.19	0.56	-0.34	.74	
Child Gender	-0.51	0.50	-1.01	.31	
Words	0.002	0.0004	5.45	5.13e-8	***
Proficiency	-0.18	0.22	-0.81	.42	
Group*Child Gender	0.81	0.65	1.25	.21	

Note. Formula: `actdird ~ group_biling * gender_male + words + proficiency + (1 | participant)`.

***$p < .001$.

Table 2B.32 Indirect Action Requests

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Indirect Action Requests During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.88	1.23	-0.71	.48	
Group	-2.29	0.69	-3.33	.0009	***
Child Gender	-1.22	0.47	-2.59	.01	*
Words	0.002	0.001	2.44	.01	*
Group*Child Gender	3.15	0.87	3.64	.0003	***

Note. Formula: `actdiri ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05, ***p < .001.

Table 2B.33 Attention Directives

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Attention Directives During Prompted

Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.26	2.14	0.12	.90	
Group	0.90	0.92	0.97	.33	
Child Gender	-0.09	0.98	-0.09	.93	
Words	0.003	0.001	3.39	.0007	***
Proficiency	-0.32	0.20	-1.62	.11	
Group*Child Gender	0.44	1.13	0.39	.70	

Note. Formula: `attdir ~ group_biling * gender_male + words + proficiency +`

`(1 | participant).`

***$p < .001$.

Table 2B.34 Positive Feedback

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Positive Feedback During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-11.92	8.78	-1.36	.18
Group	1.43	2.66	0.54	.59
Child Gender	4.05	5.34	0.76	.45
Words	0.01	0.01	1.63	.10
Group*Child Gender	-12.32	88.15	-0.14	.89

Note. Formula: `pf ~ group_biling * gender_male + words + (1 | participant).`

Table 2B.35 Negative Feedback

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Negative Feedback During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.29	1.18	-1.10	.27	
Group	-0.11	0.34	-0.33	.74	
Child Gender	-0.14	0.30	-0.48	.63	
Words	0.001	0.0004	2.37	.02	*
Proficiency	0.25	0.12	2.08	.04	*
Group*Child Gender	0.98	0.44	2.23	.03	*

Note. Formula: `nf ~ group_biling * gender_male + words + proficiency +`

`(1 | participant).`

*p < .05.

Table 2B.36 Number of Words

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Words

Bilingual and Monolingual Children Produced During Prompted Reminiscing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.34	0.67	9.49	<2e-16	***
Group	-0.24	0.34	-0.71	.48	
Child Gender	-0.08	0.21	-0.37	.71	
Exposure	0.003	0.006	0.55	.59	
Proficiency	0.01	0.07	0.10	.92	
Group*Child Gender	0.18	0.27	0.66	.51	

Note. Formula: `words ~ group_biling * gender_male + exposure + proficiency + (1 | participant)`.

***$p < .001$.

Table 2B.37 Number of Utterances

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of

Utterances Bilingual and Monolingual Children Produced During Prompted Reminiscing

(English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.14	0.65	9.50	<2e-16	***
Group	-0.63	0.33	-1.93	.05	†
Child Gender	-0.06	0.20	-0.30	.77	
Exposure	-0.01	0.01	-1.50	.13	
Proficiency	0.02	0.06	0.26	.79	
Group*Child Gender	0.15	0.25	0.59	.55	

Note. Formula: `utterances ~ group_biling * gender_male + exposure +`

`proficiency + (1 | participant).`

†*p* < .10, ****p* < .001.

Table 2B.38 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Prompted Reminiscing (English session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	16.13	16.17	2.11	123.00	Boys	4.50	2.02	1.82	11.20
	Bilingual	2.81	2.23	0.56	14.00	Girls	10.10	3.91	4.57	22.10
Description	Monolingual	25.70	7.63	14.06	46.90	Boys	15.90	2.23	12.00	21.10
	Bilingual	11.30	2.71	6.98	18.40	Girls	18.30	2.39	14.10	23.80
Open-ended question	Monolingual	2.05	0.94	0.81	5.21	Boys	3.58	1.00	2.05	6.27
	Bilingual	8.30	2.68	4.31	15.99	Girls	4.75	1.30	2.73	8.27

Closed-ended question	Monolingual	4.18	1.30	2.22	7.85	Boys	5.92	0.90	4.35	8.05
	Bilingual	8.78	1.92	5.63	13.68	Girls	6.20	0.90	4.62	8.33
Reframe	Monolingual	0.05	0.08	0.002	1	Boys	2.01e-06	0.02	0.00	Inf
	Bilingual	1.37e-06	0.02	0.00	Inf	Girls	0.03	0.06	0.001	1
Affirmation	Monolingual	3.46	1.27	1.65	7.27	Boys	2.96	0.58	1.99	4.39
	Bilingual	4.20	1.22	2.33	7.54	Girls	4.91	0.80	3.53	6.84
Repetition	Monolingual	5.72	1.82	3.00	10.90	Boys	7.52	1.30	5.30	10.70
	Bilingual	11.55	2.52	7.42	18.00	Girls	8.79	1.35	6.43	12.00
Request for repetition	Monolingual	0.52	0.21	0.23	1.16	Boys	0.79	0.27	0.40	1.55
	Bilingual	0.96	0.31	0.51	1.82	Girls	0.64	0.24	0.30	1.34

Expansion	Monolingual	0.17	0.59	0.002	171.00	Boys	4.05e-02	0.05	0.004	0.00
	Bilingual	0.00	0.01	0.00	Inf	Girls	1.71e-05	0.05	0.00	Inf
Extension	Monolingual	0.11	0.08	0.03	0.47	Boys	0.07	0.06	0.02	0.34
	Bilingual	0.07	0.05	0.02	0.33	Girls	0.11	0.08	0.03	0.45
Recast	Monolingual	9.15e-04	0.07	2.22e-16	1.15e+61	Boys	1.66e-03	0.08	2.22e-16	2.55e+37
	Bilingual	3.54e-07	0.001	2.22e-16	Inf	Girls	1.96e-07	0.0003	2.22e-16	Inf
Direct action request	Monolingual	2.15	0.69	1.12	4.13	Boys	2.27	0.86	1.05	4.91
	Bilingual	2.66	0.94	1.30	5.46	Girls	2.52	0.64	1.51	4.20
Indirect action request	Monolingual	1.16	0.65	0.37	3.61	Boys	0.97	0.50	0.34	2.74
	Bilingual	0.57	0.32	0.18	1.75	Girls	0.68	0.41	0.20	2.28

Attention directive	Monolingual	0.66	0.38	0.21	2.10	Boys	1.24	0.55	0.51	3.02
	Bilingual	2.02	0.62	1.09	3.75	Girls	1.08	0.44	0.47	2.48
Positive feedback	Monolingual	0.04	0.10	0.0004	5.00	Boys	0.001	0.06	0.00	6.80e+35
	Bilingual	0.0004	0.02	0.00	1.93e+35	Girls	0.01	0.04	1.15e-05	12.00
Negative feedback	Monolingual	3.72	0.76	2.47	5.61	Boys	5.36	1.00	3.67	7.83
	Bilingual	5.45	1.05	3.69	8.05	Girls	3.78	0.66	2.66	5.38
Total utterances	Monolingual	285.00	52.30	196.00	413.00	Boys	218.00	20.20	181.00	263.00
	Bilingual	164.00	24.10	122.00	221.00	Girls	214.00	19.20	179.00	257.00
Total words	Monolingual	718.00	138.50	486.00	1060.00	Boys	668.00	66.50	546.00	817.00
	Bilingual	615.00	94.70	450.00	839.00	Girls	660.00	62.50	545.00	800.00

Bilingual Versus Monolingual Comparisons in Thai: Maternal Results

Table 2C.1 Labels

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Labels During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.85	1.82	-1.02	.31
Language	-0.10	1.31	-0.08	.94
Child Gender	0.43	1.38	0.31	.76
Words	-0.0002	0.001	-0.23	.82
Language*Child Gender	0.71	1.87	0.38	.70

Note. Formula: `label ~ group_biling * gender_male + words +`

`(1 | participant).`

Table 2C.2 Descriptions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Descriptions During Prompted Reminiscing (Thai

Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.06	0.29	3.60	.0003	***
Group	0.21	0.25	0.84	.40	
Child Gender	-0.09	0.28	-0.33	.74	
Words	0.0007	0.0001	7.48	7.42e-14	***
Group*Child Gender	0.01	0.35	0.04	.97	

Note. Formula: `desc ~ group_biling * gender_male + words + (1 | participant).`

***$p < .001$.

Table 2C.3 Open-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Open-Ended Questions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.86	0.14	27.90	<2e-16	***
Group	-0.13	0.12	-1.14	.25	
Child Gender	-0.18	0.13	-1.38	.17	
Words	0.0005	0.00006	8.47	<2e-16	***
Group*Child Gender	0.21	0.17	1.20	.23	

Note. Formula: `oq ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 2C.4 Closed-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Closed-Ended Questions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.21	0.49	6.60	4.26e-11	***
Group	0.03	0.12	0.25	.80	
Child Gender	-0.14	0.10	-1.38	.17	
Words	0.0005	0.00006	8.70	<2e-16	***
Exposure	0.006	0.003	2.30	.02	*
Proficiency	-0.003	0.04	-0.08	.93	
Group*Child Gender	0.25	0.13	1.93	.05	†

Note. Formula: `cq ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, *p < .05, ***p < .001.

Table 2C.5 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Reframes During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.54	0.81	-0.67	.51	
Group	-1.34	0.71	-1.88	.06	†
Child Gender	-1.29	0.76	-1.69	.09	†
Words	0.0002	0.0004	0.47	.64	
Group*Child Gender	1.14	1.15	0.99	.32	

Note. Formula: `reframe ~ group_biling * gender_male + words +`

`(1 | participant)`.

†*p* < .10.

Table 2C.6 Affirmations

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Affirmations During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.07	0.53	2.02	.04	*
Group	1.76	0.37	4.73	.000002	***
Child Gender	-0.63	0.39	-1.60	.11	
Words	0.0007	0.0002	3.77	.0002	***
Group*Child Gender	0.53	0.50	1.07	.29	

Note. Formula: `aff ~ group_biling * gender_male + words + (1 | participant)`.

p < .05, ***p* < .001.

Table 2C.7 Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Repetitions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.40	0.21	11.49	<2-16	***
Group	0.12	0.18	0.71	.48	
Child Gender	-0.19	0.19	-0.99	.32	
Words	0.0006	0.00008	7.15	9.03e-13	***
Group*Child Gender	-0.08	0.26	-0.31	.76	

Note. Formula: `rep ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table C2.8 Requests for Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Requests for Repetitions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.15	0.53	0.28	.78	
Group	-0.61	0.44	-1.38	.17	
Child Gender	-0.18	0.46	-0.39	.70	
Words	0.0006	0.0002	3.04	.002	**
Group*Child Gender	0.34	0.64	0.54	.59	

Note. Formula: `reqrep ~ group_biling * gender_male + words +`

`(1 | participant).`

**$p < .01$.

Table C2.9 Recasts

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Recasts During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.90	0.48	-1.87	.06	†
Group	1.26	0.45	2.78	.005	**
Child Gender	0.98	0.48	2.05	.04	*
Words	0.0004	0.0001	3.14	.002	**
Group*Child Gender	-1.48	0.55	-2.69	.007	**

Note. Formula: `recast ~ group_biling * gender_male + words + (1 | participant)`.

†*p* < .10, **p* < .05, ***p* < .01.

Table 2C.10 Expansions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Expansions During Prompted Reminiscing (Thai

Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.73	0.43	-1.70	.09	†
Group	1.13	0.34	3.35	.0008	***
Child Gender	-0.03	0.38	-0.07	.94	
Words	0.0008	0.0002	5.48	4.17e-8	***
Group*Child Gender	-0.78	0.49	-1.58	.11	

Note. Formula: `exp ~ group_biling * gender_male + words + (1 | participant)`.

†*p* < .10, ****p* < .001.

Table 2C.11 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Extensions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.41	1.04	-1.36	.18
Group	-0.51	0.94	-0.54	.59
Child Gender	0.97	0.84	1.15	.25
Words	-0.00009	0.0004	-0.22	.82
Group*Child Gender	-0.35	1.24	-0.28	.78

Note. Formula: `ext ~ group_biling * gender_male + words + (1 | participant)`.

Table 2C.12 Direct Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Direct Action Requests During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.46	0.33	4.42	.00001	***
Group	-0.16	0.28	-0.58	.56	
Child Gender	0.34	0.29	1.18	.24	
Words	0.0005	0.0001	3.71	.0002	***
Group*Child Gender	-0.11	0.40	-0.27	.79	

Note. Formula: `actdird ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 2C.13 Indirect Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Indirect Action Requests During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.71	0.56	3.04	.002	**
Group	-0.75	0.29	-2.58	.01	*
Child Gender	0.62	0.28	2.19	.03	*
Words	0.0001	0.0003	0.59	.56	
Group*Child Gender	-0.94	0.44	-2.15	.03	*

Note. Formula: `actdiri ~ group_biling * gender_male + words +`

`(1 | participant)`.

*p < .05, **p < .01.

Table 2C.14 Attention Directives

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Attention Directives During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.76	1.73	-1.60	.11	
Group	0.31	1.11	0.28	.78	
Child Gender	2.00	1.02	1.96	.05	†
Words	0.0002	0.0005	0.37	.71	
Group*Child Gender	-0.46	1.34	-0.35	.73	

Note. Formula: `attdir ~ group_biling * gender_male + words +`

`(1 | participant)`.

†*p* < .10.

Table 2C.15 Positive Feedback

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Positive Feedback During Prompted Reminiscing

(Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-6.59	2.39	-2.76	.006	**
Group	-0.72	0.49	-1.46	.14	
Child Gender	-0.44	0.48	-0.92	.36	
Words	0.0007	0.0003	2.60	.009	**
Proficiency	0.71	0.24	2.91	.004	**
Group*Child Gender	-0.23	0.82	-0.28	.78	

Note. Formula: `pf ~ group_biling * gender_male + words + proficiency +`

`(1 | participant).`

**p* < .01.

Table 2C.16 Negative Feedback

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Mothers' Use of Negative Feedback During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.81	0.29	2.82	.005	**
Group	-0.08	0.24	-0.33	.74	
Child Gender	0.02	0.26	0.07	.95	
Words	0.0006	0.0001	5.09	.0000004	***
Group*Child Gender	-0.17	0.35	-0.48	.63	

Note. Formula: `nf ~ group_biling * gender_male + words + (1 | participant)`.

**p < .01, ***p < .001.

Table 2C.17 Number of Words

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of Words Bilingual and Monolingual Mothers Produced During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	7.54	0.12	61.77	<2e-16	***
Group	-0.05	0.16	-0.30	.76	
Child Gender	0.09	0.18	0.49	.62	
Group*Child Gender	0.11	0.24	0.46	.64	

Note. Formula: `words ~ group_biling * gender_male + (1 | participant)`.

***$p < .001$.

Table 2C.18 Number of Utterances

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Utterances

Bilingual and Monolingual Mothers Produced During Prompted Reminiscing (Thai Session)

Predictors	Estimate	SE	z	p	
Intercept	5.58	0.13	43.33	<2e-16	***
Group	-0.21	0.17	-1.22	.22	
Child Gender	-0.14	0.19	-0.77	.44	
Group*Child Gender	0.30	0.25	1.20	.23	

Note. Formula: `utterances ~ group_biling * gender_male + (1 | participant)`.

***$p < .001$.

Table 2C.19 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Maternal Linguistic Measures During Prompted Reminiscing (Thai Session)

Maternal linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	0.14	0.12	0.02	0.83	Boys	0.24	0.21	0.04	1.36
	Bilingual	0.18	0.16	0.03	1.12	Girls	0.11	0.10	0.02	0.69
Description	Monolingual	11.80	1.76	8.74	16.00	Boys	12.60	1.86	9.36	17.00
	Bilingual	14.70	1.85	11.37	19.00	Girls	13.70	1.81	10.53	17.90
Open-ended question	Monolingual	112.00	7.12	98.00	127.00	Boys	106.00	6.72	93.10	120.00
	Bilingual	108.00	6.24	96.20	121.00	Girls	114.00	6.74	101.00	128.00

Closed-ended question	Monolingual	98.10	6.24	86.30	112.00	Boys	106.00	5.57	94.80	117.00
	Bilingual	114.90	6.19	103.00	128.00	Girls	107.00	5.14	96.90	118.00
Reframe	Monolingual	0.42	0.20	0.16	1.09	Boys	0.20	0.12	0.06	0.64
	Bilingual	0.19	0.11	0.06	0.62	Girls	0.41	0.19	0.16	1.06
Affirmation	Monolingual	7.66	1.89	4.65	12.60	Boys	17.50	3.45	11.80	26.10
	Bilingual	57.89	8.62	42.84	78.20	Girls	25.30	4.48	17.70	36.20
Repetition	Monolingual	32.70	3.13	26.90	39.70	Boys	30.40	2.90	25.10	36.90
	Bilingual	35.60	3.07	29.90	42.30	Girls	38.20	3.37	32.00	45.70
Request for repetition	Monolingual	3.76	0.87	2.36	6.00	Boys	3.02	0.73	1.86	4.91
	Bilingual	2.44	0.56	1.53	3.89	Girls	3.03	0.68	1.93	4.76

Expansion	Monolingual	2.39	0.49	1.58	3.62	Boys	2.82	0.54	1.91	4.15
	Bilingual	5.03	0.78	3.68	6.89	Girls	4.27	0.73	3.02	6.05
Extension	Monolingual	0.33	0.18	0.11	0.97	Boys	0.35	0.19	0.12	1.03
	Bilingual	0.17	0.10	0.05	0.54	Girls	0.16	0.09	0.05	0.52
Recast	Monolingual	1.49	0.38	0.89	2.50	Boys	2.17	0.38	1.52	3.10
	Bilingual	2.49	0.35	1.87	3.31	Girls	1.70	0.39	1.07	2.71
Direct action request	Monolingual	13.60	2.00	10.14	18.30	Boys	14.10	2.07	10.53	19.00
	Bilingual	11.00	1.51	8.32	14.50	Girls	10.60	1.48	7.97	14.00
Indirect action request	Monolingual	10.10	1.49	7.52	13.62	Boys	5.96	1.07	4.15	8.56
	Bilingual	3.00	0.53	2.10	4.29	Girls	5.10	0.76	3.77	6.89

Attention directive	Monolingual	0.25	0.17	0.07	0.96	Boys	0.63	0.33	0.22	1.79
	Bilingual	0.27	0.16	0.08	0.87	Girls	0.11	0.08	0.03	0.46
Positive feedback	Monolingual	2.83	0.80	1.60	5.00	Boys	1.41	0.59	0.60	3.30
	Bilingual	1.23	0.47	0.57	2.66	Girls	2.46	0.64	1.46	4.16
Negative feedback	Monolingual	6.87	0.89	5.29	8.92	Boys	6.12	0.80	4.70	7.98
	Bilingual	5.84	0.71	4.57	7.46	Girls	6.55	0.79	5.13	8.36
Total utterances	Monolingual	246.00	23.00	204.00	297.00	Boys	240.00	21.90	199.00	288.00
	Bilingual	232.00	19.50	196.00	275.00	Girls	238.00	20.50	200.00	283.00
Total words	Monolingual	1963.00	174.00	1642.00	2346.00	Boys	2113.00	183.00	1774.00	2517.00
	Bilingual	1974.00	157.00	1680.00	2318.00	Girls	1833.00	149.00	1554.00	2161.00

Bilingual Versus Monolingual Comparisons in Thai: Child Results

Table 2C.20 Labels

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Labels During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-4.11	3.57	-1.15	.25	
Group	3.84	1.89	2.03	.04	*
Child Gender	-0.57	1.66	-0.34	.73	
Words	-0.001	0.001	-1.06	.29	
Exposure	0.07	0.04	1.86	.06	†
Proficiency	-0.63	0.34	-1.88	.06	†
Group*Child Gender	2.16	2.01	1.07	.28	

Note. Formula: `label ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

†*p* < .10, **p* < .05.

Table 2C.21 Descriptions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Children's Use of Descriptions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.45	0.21	6.83	8.33e-12	***
Group	0.64	0.20	3.28	.001	**
Child Gender	0.08	0.22	0.35	.73	
Words	0.001	0.0001	8.70	<2e-16	***
Group*Child Gender	-0.05	0.28	-0.17	.87	

Note. Formula: `desc ~ group_biling * gender_male + words + (1 | participant)`.

**p < .01, ***p < .001.

Table 2C.22 Open-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Open-Ended Questions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.83	0.38	2.19	.03	*
Group	-0.26	0.36	-0.70	.48	
Child Gender	0.76	0.37	2.06	.04	*
Words	0.0006	0.0002	2.26	.02	*
Group*Child Gender	-0.36	0.51	-0.70	.48	

Note. Formula: `oq ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05.

Table 2C.23 Closed-Ended Questions

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Closed-Ended Questions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.40	0.58	0.69	.49	
Group	0.04	0.42	0.11	.92	
Child Gender	0.18	0.44	0.40	.69	
Words	0.0009	0.0004	2.64	.008	**
Group*Child Gender	0.26	0.58	0.45	.65	

Note. Formula: `cq ~ group_biling * gender_male + words + (1 | participant)`.

**p < .01.

Table 2C.24 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Reframes During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-11.07	425.17	-0.03	.98
Group	1.08	458.22	0.002	.99
Child Gender	1.05	458.28	0.002	.99
Words	-0.007	0.006	-1.11	.27
Group*Child Gender	10.66	489.11	0.02	.98

Note. Formula: `reframe ~ group_biling * gender_male + words + (1 | participant)`.

Table 2C.25 Affirmations

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Affirmations During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.72	0.64	-1.13	.26	
Group	0.63	0.58	1.08	.28	
Child Gender	-0.52	0.68	-0.76	.45	
Words	0.001	0.0003	4.50	.000007	***
Group*Child Gender	1.12	0.85	1.32	.19	

Note. Formula: `aff ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 2C.26 Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Repetitions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.29	0.32	3.98	.00007	***
Group	0.51	0.29	1.75	.08	†
Child Gender	0.007	0.33	0.02	.98	
Words	0.0005	0.0002	2.32	.02	*
Group*Child Gender	0.03	0.42	0.08	.94	

Note. Formula: `rep ~ group_biling * gender_male + words + (1 | participant)`.

†*p* < .10, *p < .05, ***p < .001.

Table 2C.27 Requests for Repetitions

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Requests for Repetitions During Prompted Reminiscing (Thai Session)

Predictors	Estimate	SE	z	p	
Intercept	-2.94	1.23	-2.38	.02	*
Group	2.17	1.16	1.87	.06	†
Child Gender	2.68	1.12	2.39	.02	*
Words	0.0006	0.0004	1.25	.21	
Group*Child Gender	-0.98	1.25	-0.78	.43	

Note. Formula: `reqrep ~ group_biling * gender_male + words +`

`(1 | participant).`

†*p* < .10, *p* < .05

Table 2C.28 Recasts

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Recasts During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-14.42	362.70	-0.04	.97
Group	11.60	362.70	0.03	.97
Child Gender	-7.80	19932.00	0.00	1.00
Words	0.0002	0.001	0.16	.87
Group*Child Gender	-3.53	19320.00	0.00	1.00

Note. Formula: `recast ~ group_biling * gender_male + words +`

`(1 | participant).`

Table 2C.29 Expansions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Children's Use of Expansions During Prompted Reminiscing (Thai

Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.95	0.97	-2.01	.04	*
Group	-0.19	1.02	-0.19	.85	
Child Gender	0.15	1.02	0.15	.88	
Words	0.0002	0.0005	0.49	.62	
Group*Child Gender	0.42	1.36	0.31	.75	

Note. Formula: `exp ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05.

Table 2C.30 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Extensions During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-6.07	3.65	-1.66	.10
Group	-19.47	26460.00	-0.001	.99
Child Gender	16.04	2.83	0.06	.95
Words	-0.0001	0.002	-0.07	.95
Group*Child Gender	19.89	26460.00	0.001	.99

Note. Formula: `ext ~ group_biling * gender_male + words + (1 | participant).`

Table 2C.31 Direct Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Direct Action Requests During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.47	0.83	-2.97	.003	**
Group	1.32	0.80	1.64	.10	
Child Gender	1.78	0.79	2.24	.03	*
Words	0.0006	0.0002	2.66	.008	**
Group*Child Gender	-1.25	0.91	-1.37	.17	

Note. Formula: `actdird ~ group_biling * gender_male + words +`

`(1 | participant).`

p < .05, **p* < .01.

Table 2C.32 Indirect Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Indirect Action Requests During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.05	1.01	-2.03	.04	*
Group	-1.64	1.07	-1.54	.12	
Child Gender	0.66	0.82	0.81	.42	
Words	0.001	0.0006	1.65	.10	
Group*Child Gender	-0.97	1.62	-0.60	.55	

Note. Formula: `actdiri ~ group_biling * gender_male + words +`

`(1 | participant)`.

p < .05, ****p* < .001.

Table 2C.33 Attention Directives

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Attention Directives During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-5.11	2.61	-1.96	.05	†
Group	3.02	1.32	2.28	.02	*
Child Gender	1.44	0.93	1.54	.12	
Words	0.001	0.0006	1.80	.07	†
Exposure	0.06	0.03	2.29	.02	*
Proficiency	-0.53	0.20	-2.66	.008	**
Group*Child Gender	0.50	1.22	0.41	.68	

Note. Formula: `attdir ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, *p < .05, **p < .01.

Table 2C.34 Positive Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Positive Feedback During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	11.04	3.83	2.73	.006	**
Group	-17.06	78.60	-0.22	.83	
Child Gender	0.18	0.71	0.25	.80	
Words	0.003	0.0006	5.78	7.61e-09	***
Exposure	-0.13	0.04	-3.20	.001	**
Proficiency	-0.41	0.18	-3.20	.02	*
Group*Child Gender	-1.09	183.70	-0.006	.99	

Note. Formula: `pf ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

p < .05, **p* < .01, ***p* < .001.

Table 2C.35 Negative Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Negative Feedback During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.03	0.43	-0.08	.94	
Group	-0.06	0.38	-0.15	.88	
Child Gender	0.23	0.39	0.58	.56	
Words	0.0007	0.0003	2.67	.008	**
Group*Child Gender	-0.04	0.53	-0.08	.94	

Note. Formula: `nf ~ group_biling * gender_male + words + (1 | participant)`.

**$p < .01$.

Table 2C.36 Number of Words

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Words

Bilingual and Monolingual Children Produced During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.73	0.20	33.74	<2e-16	***
Group	-0.21	0.27	-0.80	.42	
Child Gender	-0.35	0.29	-1.21	.23	
Group*Child Gender	0.43	0.39	1.10	.27	

Note. Formula: `words ~ group_biling * gender_male + (1 | participant)`.

***$p < .001$.

Table 2C.37 Number of Utterances

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Utterances

Bilingual and Monolingual Children Produced During Prompted Reminiscing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	5.22	0.15	34.37	<2e-16	***
Group	-0.14	0.20	-0.71	.48	
Child Gender	-0.20	0.22	-0.90	.37	
Group*Child Gender	0.32	0.30	1.06	.29	

Note. Formula: `utterances ~ group_biling * gender_male + (1 | participant)`.

***$p < .001$.

Table 2C.38 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Prompted Reminiscing (Thai Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	0.007	0.01	0.0004	0.12	Boys	0.10	0.08	0.02	0.54
	Bilingual	0.90	0.71	0.18	4.47	Girls	0.06	0.05	0.01	0.37
Description	Monolingual	11.40	1.26	9.10	14.20	Boys	15.90	1.63	12.90	19.60
	Bilingual	21.10	1.88	17.60	25.30	Girls	15.10	1.46	12.40	18.40
Open-ended question	Monolingual	5.46	1.02	3.74	7.98	Boys	5.89	1.09	4.05	8.56
	Bilingual	3.54	0.65	2.44	5.12	Girls	3.28	0.61	2.26	4.77

Closed-ended question	Monolingual	3.61	0.98	2.09	6.24	Boys	4.59	0.91	3.08	6.85
	Bilingual	4.30	0.84	2.90	6.38	Girls	3.38	0.79	2.11	5.41
Reframe	Monolingual	6.39e-08	1.46e-05	2.22e-16	6.38e+193	Boys	3.82e-05	3.27e-03	2.22e-16	4.33e+70
	Bilingual	3.87e-05	3.31e-03	2.22e-16	3.80e+70	Girls	6.47e-08	1.48e-05	2.22e-16	6.12e+193
Affirmation	Monolingual	1.30	0.45	0.65	2.60	Boys	2.40	0.75	1.28	4.49
	Bilingual	4.26	1.07	2.57	7.07	Girls	2.30	0.66	1.29	4.12
Repetition	Monolingual	5.50	0.91	3.94	7.67	Boys	7.23	1.12	5.29	9.89
	Bilingual	9.29	1.28	7.04	12.26	Girls	7.06	1.05	5.23	9.55
Request for repetition	Monolingual	0.33	0.21	0.09	1.20	Boys	2.24	0.66	1.24	4.05
	Bilingual	1.74	0.61	0.86	3.55	Girls	0.25	0.17	0.06	0.99

Expansion	Monolingual	0.19	0.10	0.06	0.54	Boys	0.23	0.10	0.09	0.57
	Bilingual	0.19	0.09	0.08	0.48	Girls	0.16	0.08	0.05	0.46
Extension	Monolingual	2.24e-03	0.006	1.15e-05	0	Boys	2.98e-03	0.008	1.79e-05	0
	Bilingual	1.63e-07	0.002	0.00	Inf	Girls	1.22e-07	0.002	0.00	Inf
Recast	Monolingual	1.33e-08	0.0001	2.22e-16	Inf	Boys	1.52e-08	0.0001	2.22e-16	Inf
	Bilingual	2.48e-04	0.04	2.22e-16	1.2e+134	Girls	2.17e-04	0.04	2.22e-16	3.42e+155
Direct action request	Monolingual	0.36	0.16	0.15	0.84	Boys	0.90	0.21	0.56	1.44
	Bilingual	0.72	0.17	0.44	1.17	Girls	0.29	0.12	0.12	0.68
Indirect action request	Monolingual	0.43	0.25	0.13	1.39	Boys	0.16	0.12	0.03	0.76
	Bilingual	0.05	0.04	0.01	0.30	Girls	0.14	0.10	0.03	0.58

Attention directive	Monolingual	0.04	0.04	0.01	0.35	Boys	0.52	0.24	0.20	1.32
	Bilingual	1.14	0.53	0.44	2.93	Girls	0.10	0.07	0.02	0.43
Positive feedback	Monolingual	3.14	2.39	0.68	15.00	Boys	0.0004	0.03	2.22e-16	3.33e+69
	Bilingual	1.00e-07	6.50e-06	0.00	3.5e+73	Girls	0.001	0.02	2.22e-16	1.86e+31
Negative feedback	Monolingual	1.98	0.43	1.28	3.06	Boys	2.11	0.44	1.39	3.20
	Bilingual	1.83	0.36	1.23	2.72	Girls	1.72	0.36	1.13	2.61
Total utterances	Monolingual	168.00	18.50	134.00	209.00	Boys	165.00	17.90	133.00	206.00
	Bilingual	170.00	16.90	139.00	208.00	Girls	172.00	17.50	140.00	212.00
Total words	Monolingual	701.00	101.40	524.00	939.00	Boys	656.00	92.90	493.00	873.00
	Bilingual	702.00	91.40	540.00	913.00	Girls	751.00	100.10	574.00	983.00

Appendix 3 Chapter 3: Book Sharing

Raw Means

Table 3.1 Maternal Raw Means

Mean Frequencies (Standard Deviations) of Mothers' Language Use During Book Sharing

Maternal linguistic measure	Bilingual				Monolingual			
	Language		Child gender		Language		Child gender	
	English	Thai	Boys	Girls	English	Thai	Boys	Girls
Label	6.50	5.31	6.00	5.82	4.00	4.86	3.48	5.38
	(4.64)	(3.45)	(3.89)	(4.33)	(4.14)	(3.05)	(3.04)	(3.96)
Description	3.08	7.92	3.79	6.96	8.86	5.52	7.57	6.81
	(3.55)	(15.57)	(3.82)	(15.17)	(6.81)	(4.73)	(6.27)	(5.91)
Open-ended question	16.46	33.12	22.38	26.86	32.33	38.52	38.38	32.48
	(10.08)	(19.53)	(13.89)	(20.17)	(15.90)	(23.18)	(17.86)	(21.75)
Closed-ended question	11.00	25.31	14.13	21.61	20.81	32.29	27.57	25.52
	(7.74)	(21.52)	(12.22)	(20.71)	(10.10)	(14.09)	(15.10)	(11.81)
Reframe	0.50	0.42	0.42	0.50	0.48	0.67	0.71	0.43
	(0.71)	(0.64)	(0.65)	(0.69)	(0.75)	(1.06)	(1.10)	(0.68)
Affirmation	9.42	7.12	5.71	10.46	6.57	4.48	4.95	6.10
	(9.30)	(8.16)	(4.44)	(10.81)	(4.53)	(4.14)	(4.30)	(4.57)
Repetition	8.00	5.50	5.71	7.64	9.33	10.76	10.05	10.05
	(5.87)	(6.16)	(5.50)	(6.52)	(5.37)	(10.03)	(8.89)	(7.17)

Request for repetition	0.50 (0.86)	0.54 (1.14)	0.71 (1.23)	0.36 (0.73)	0.48 (1.12)	0.57 (0.81)	0.52 (1.12)	0.52 (0.91)
Expansion	0.46 (0.81)	1.35 (1.50)	0.88 (1.19)	0.93 (1.36)	0.90 (0.83)	3.05 (2.69)	1.52 (1.75)	2.43 (2.62)
Extension	0.35 (0.63)	0.23 (0.43)	0.36 (0.56)	0.21 (0.51)	1.86 (1.93)	0.38 (0.97)	1.10 (1.48)	1.14 (1.90)
Recast	0.08 (0.39)	0.62 (0.85)	0.25 (0.68)	0.43 (0.74)	0.86 (1.24)	0.14 (0.36)	0.38 (0.67)	0.62 (1.20)
Direct action request	3.92 (4.46)	7.88 (5.24)	4.25 (4.87)	7.32 (5.16)	6.14 (3.17)	5.14 (4.53)	6.48 (4.56)	4.81 (2.98)
Indirect action request	2.08 (2.23)	1.69 (3.62)	1.25 (2.03)	2.43 (3.55)	1.43 (1.80)	6.14 (4.25)	4.05 (4.41)	3.52 (3.66)
Attention directive	3.38 (4.06)	9.12 (10.78)	3.63 (3.70)	8.50 (10.75)	2.95 (2.69)	11.24 (6.56)	7.95 (7.27)	6.24 (5.66)
Positive feedback	0.38 (0.64)	0.08 (0.27)	0.21 (0.51)	0.25 (0.52)	1.43 (1.63)	1.10 (2.19)	1.00 (1.55)	1.52 (2.23)
Negative feedback	2.35 (1.90)	2.19 (3.25)	1.88 (1.62)	2.61 (3.26)	2.14 (1.96)	1.43 (1.86)	1.48 (1.72)	2.10 (2.10)
Total utterances	86.08 (34.24)	65.04 (39.37)	62.71 (24.13)	86.57 (43.52)	117.81 (39.25)	99.95 (35.71)	113.43 (35.51)	104.33 (40.97)

Total words	473.92	919.27	581.63	795.14	792.29	958.00	889.81	860.48
	(202.39)	(457.74)	(256.67)	(499.48)	(288.99)	(320.19)	(263.60)	(361.28)

Table 3.2 Child Raw Means

Mean Frequencies (Standard Deviations) of Child Language Use During Book Sharing

Child linguistic measure	Bilingual				Monolingual			
	Language		Child gender		Language		Child gender	
	English	Thai	Boys	Girls	English	Thai	Boys	Girls
Label	4.38	3.12	4.08	3.46	3.57	3.29	2.57	4.29
	(3.07)	(2.66)	(3.03)	(2.83)	(4.35)	(2.81)	(2.94)	(4.09)
Description	1.42	1.19	1.17	1.43	2.52	1.52	1.57	2.48
	(1.88)	(1.90)	(1.63)	(2.08)	(5.55)	(1.99)	(2.23)	(5.46)
Open-ended question	3.62	1.81	2.00	3.32	4.00	3.90	3.62	4.29
	(4.30)	(2.33)	(2.48)	(4.20)	(4.46)	(3.67)	(3.94)	(4.20)
Closed-ended question	1.54	0.69	0.63	1.54	2.19	1.05	2.05	1.19
	(2.89)	(1.16)	(1.41)	(2.69)	(3.50)	(1.32)	(3.53)	(1.36)
Reframe	0.08	0 (0)	0 (0)	0.07	0 (0)	0 (0)	0 (0)	0 (0)
	(0.27)			(0.26)				
Affirmation	2.65	0.92	1.46	2.07	1.52	0.67	0.90	1.29
	(4.66)	(2.00)	(1.84)	(4.71)	(1.47)	(1.11)	(1.48)	(1.23)
Repetition	3.12	2.38	2.29	3.14	0.90	1.57	0.90	1.57
	(7.36)	(2.53)	(2.24)	(7.19)	(0.94)	(1.78)	(1.00)	(1.75)
Request for repetition	0.04	0.08	0.13	0 (0)	0.10	0 (0)	0.10	0 (0)
	(0.20)	(0.27)	(0.34)		(0.30)		(0.30)	

Expansion	0.04 (0.20)	0.15 (0.46)	0.08 (0.41)	0.11 (0.31)	0 (0)	0.05 (0.22)	0 (0)	0.05 (0.22)
Extension	0.08 (0.39)	0 (0)	0 (0)	0.07 (0.38)	0.05 (0.22)	0.05 (0.22)	0.05 (0.22)	0.05 (0.22)
Recast	0.04 (0.20)	0 (0)	0 (0)	0.04 (0.19)	0.05 (0.22)	0 (0)	0 (0)	0.05 (0.22)
Direct action request	1.12 (1.42)	0.38 (0.64)	0.58 (1.06)	0.89 (1.23)	2.00 (2.12)	0.19 (0.40)	0.86 (1.15)	1.33 (2.22)
Indirect action request	0.04 (0.20)	0.08 (0.27)	0.04 (0.20)	0.07 (0.26)	0.29 (0.56)	0.24 (0.44)	0.14 (0.36)	0.38 (0.59)
Attention directive	0.81 (1.36)	0.92 (1.16)	0.79 (1.35)	0.93 (1.18)	0.81 (1.40)	0.71 (0.85)	0.71 (0.85)	0.81 (1.40)
Positive feedback	0.08 (0.39)	0.04 (0.20)	0 (0)	0.11 (0.42)	0.05 (0.22)	0.67 (1.11)	0.29 (0.78)	0.43 (0.93)
Negative feedback	0.81 (1.20)	0.31 (0.84)	0.42 (0.72)	0.68 (1.28)	0.62 (0.92)	0.38 (0.80)	0.57 (0.87)	0.43 (0.87)
Total utterances	40.42 (25.75)	31.38 (27.78)	27.42 (17.37)	43.18 (31.50)	63.10 (29.64)	38.43 (26.27)	49.71 (30.98)	51.81 (30.43)
Total words	110.35 (86.62)	103.38 (107.12)	78.79 (57.93)	130.93 (115.91)	221.52 (150.97)	119.81 (86.58)	162.81 (132.29)	178.52 (134.49)

Within Bilingual Comparisons (English Versus Thai): Maternal Results

Table 3A.1 Labels

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Labels During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.44	0.24	6.09	1.12e-9	***
Language	-0.80	0.29	-2.75	.006	**
Child Gender	0.05	0.25	0.20	.84	
Words	0.0008	0.0003	2.68	.007	**
Language*Child Gender	0.40	0.35	1.12	.26	

Note. Formula: `label ~ lang_thai * gender_male + words + (1 | participant)`.

**p* < .01, ****p* < .001.

Table 3A.2 Descriptions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Descriptions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.28	1.06	1.21	.23	
Language	0.11	0.51	0.22	.83	
Child Gender	0.15	0.37	0.40	.69	
Words	0.002	0.0003	7.15	8.47e-13	***
Exposure	-0.01	0.009	-1.76	.08	†
Proficiency	-0.12	0.14	-0.93	.35	
Language*Child Gender	0.60	0.53	1.14	.26	

Note. Formula: `desc ~ lang_thai * gender_male + words + exposure +`

`proficiency + (1 | participant).`

†*p* < .10, ****p* < .001.

Table 3A.3 Open-Ended Questions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Open-Ended Questions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.17	0.21	10.32	<2e-16	***
Language	0.22	0.19	1.20	.23	
Child Gender	0.09	0.24	0.38	.70	
Words	0.001	0.0002	4.05	.00005	***
Language*Child Gender	0.06	0.21	0.28	.78	

Note. Formula: `oq ~ lang_thai * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3A.4 Closed-Ended Questions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Mothers' Use of Closed-Ended Questions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.44	0.25	5.81	6.41e-9	***
Language	-0.13	0.20	-0.65	.52	
Child Gender	-0.03	0.27	-0.09	.93	
Words	0.002	0.0003	6.02	1.73e-9	***
Language*Child Gender	0.18	0.20	0.90	.37	

Note. Formula: `cq ~ lang_thai * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3A.5 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Mothers' Use of

Reframes During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.48	0.46	-3.21	.001	**
Language	-0.48	0.72	-0.67	.51	
Child Gender	0.47	0.56	0.85	.40	
Words	0.001	0.0003	3.31	.0009	***
Language*Child Gender	-0.77	0.94	-0.83	.41	

Note. Formula: `reframe ~ lang_thai * gender_male + words + (1 | participant)`.

**p < .01, ***p < .001.

Table 3A.6 Affirmations

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Affirmations During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.50	0.30	4.94	0.0000008	***
Language	-0.98	0.31	-3.16	.002	**
Child Gender	-0.20	0.35	-0.58	.56	
Words	0.001	0.0004	3.24	.001	**
Language*Child Gender	0.18	0.36	0.51	.61	

Note. Formula: `aff ~ lang_thai * gender_male + words + (1 | participant)`.

**p < .01, ***p < .001.

Table 3A.7 Repetitions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Mothers' Use of Repetitions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.39	0.33	4.27	.00002	***
Language	-0.81	0.27	-2.95	.003	**
Child Gender	-0.07	0.35	-0.21	.84	
Words	0.001	0.0004	2.62	.009	**
Language*Child Gender	-0.22	0.30	-0.72	.47	

Note. Formula: `rep ~ lang_thai * gender_male + words + (1 | participant).`

**p < .01, ***p < .001.

Table 3A.8 Requests for Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Mothers' Use of Requests for Repetitions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.17	0.88	-2.46	.01	*
Language	-1.29	0.93	-1.39	.17	
Child Gender	0.52	0.76	0.69	.49	
Words	0.001	0.0009	1.53	.13	
Language*Child Gender	1.16	0.89	1.31	.19	

Note. Formula: `reqrep ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 3A.9 Recasts

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Recasts During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.39	1.03	-2.33	.02	*
Language	1.37	0.92	1.49	.14	
Child Gender	-8.39	51.99	-0.16	.87	
Words	0.0004	0.0008	0.53	.60	*
Language*Child Gender	8.16	51.99	0.16	.88	

Note. Formula: `recast ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 3A.10 Expansions

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Expansions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.32	0.65	-2.01	.04	*
Language	1.67	0.73	2.31	.02	*
Child Gender	1.34	0.72	1.86	.06	†
Words	0.0004	0.0003	1.47	.14	
Language*Child Gender	1.33	0.88	-1.52	.13	

Note. Formula: `exp ~ lang_thai * gender_male + words + (1 | participant)`.

†*p* < .10, *p < .05.

Table 3A.11 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Mothers' Use of Extensions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.20	0.71	-1.70	.09	†
Language	-0.70	0.82	-0.86	.39	
Child Gender	-0.47	0.73	-0.64	.53	
Words	0.0005	0.0008	0.64	.52	
Language*Child Gender	0.12	1.14	0.10	.92	

Note. Formula: `ext ~ lang_thai * gender_male + words + (1 | participant)`.

†*p* < .10.

Table 3A.12 Direct Action Requests

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Direct Action Requests During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.12	0.28	3.94	.00008	***
Language	0.09	0.29	0.31	.76	
Child Gender	-0.80	0.31	-2.55	.01	*
Words	0.0009	0.0004	2.04	.04	*
Language*Child Gender	0.65	0.34	1.91	.06	†

Note. Formula: `actdird ~ lang_thai * gender_male + words + exposure +`

`proficiency +(1 | participant).`

†*p* < .10, *p < .05, ***p < .001.

Table 3A.13 Indirect Action Requests

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Mothers' Use of Indirect Action Requests During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.17	0.31	0.54	.59	
Language	-1.30	0.57	-2.29	.02	*
Child Gender	-0.18	0.41	-0.43	.67	
Words	0.002	0.0003	4.75	.000002	***
Language*Child Gender	0.02	0.72	0.03	.98	

Note. Formula: `actdiri ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05, ***p < .001.

Table 3A.14 Attention Directives

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Mothers' Use of Attention Directives During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.83	0.24	3.55	.00004	***
Language	0.21	0.29	0.71	.48	
Child Gender	-0.70	0.33	-2.11	.03	*
Words	0.001	0.0002	5.20	.0000002	***
Language*Child Gender	0.40	0.43	0.93	.35	

Note. Formula: `attdir ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, ****p* < .001.

Table 3A.15 Positive Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Mothers' Use of

Positive Feedback During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.38	1.08	-1.28	.20
Language	-22.56	23370.00	-0.001	.99
Child Gender	-0.62	0.80	-0.78	.44
Words	0.0008	0.002	0.52	.60
Language*Child Gender	21.84	23370.00	0.001	.99

Note. Formula: `pf ~ lang_thai * gender_male + words + (1 | participant).`

†*p* < .10

Table 3A.16 Negative Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Mothers' Use of

Negative Feedback During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.29	0.36	-0.80	.42	
Language	-0.29	0.34	-0.84	.40	
Child Gender	0.68	0.35	1.92	.05	†
Words	0.001	0.0004	3.44	.0006	***
Language*Child Gender	-1.31	0.44	-2.99	.003	**

Note. Formula: `nf ~ lang_thai * gender_male + words + (1 | participant)`.

†*p* < .10, *******p* < .01, *********p* < .001.

Table 3A.17 Number of Words

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of Words Bilingual Mothers Produced During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.22	0.11	58.20	<2e-16	***
Language	0.66	0.10	6.85	7.44e-12	***
Child Gender	-0.23	0.16	-1.47	.14	
Language*Child Gender	-0.04	0.14	-0.29	.77	

Note. Formula: `words ~ lang_thai * gender_male + (1 | participant)`.

***$p < .001$.

Table 3A.18 Number of Utterances

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of Utterances Bilingual Mothers Produced During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	4.51	0.11	40.09	<2e-16	***
Language	-0.26	0.10	-2.52	.01	*
Child Gender	-0.22	0.17	-1.31	.19	
Language*Child Gender	-0.13	0.16	-0.86	.39	

Note. Formula: `utterances ~ lang_thai * gender_male + (1 | participant)`.

p < .05, ****p* < .001.

Table 3A.19 Estimated Marginal Means

Estimated Marginal Means of Bilingual Mothers' Language Use During Book Sharing

Maternal linguistic measure	Language	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	7.69	1.06	5.83	10.15	Boys	6.45	0.84	4.95	8.39
	Thai	4.22	0.61	3.15	5.66	Girls	5.03	0.63	3.91	6.48
Description	English	2.86	0.84	1.59	5.16	Boys	4.39	0.77	3.08	6.27
	Thai	4.32	1.18	2.48	7.51	Girls	2.81	0.49	1.98	4.00
Open-ended question	English	18.10	2.36	13.90	23.50	Boys	21.80	3.38	16.00	29.80
	Thai	23.30	2.94	18.10	30.10	Girls	19.30	2.81	14.40	25.90

Closed-ended question	English	13.00	1.84	9.80	17.30	Boys	13.20	2.34	9.25	18.90
	Thai	12.60	1.90	9.25	17.00	Girls	12.40	2.10	8.80	17.40
Reframe	English	0.63	0.18	0.36	1.12	Boys	0.43	0.15	0.21	0.85
	Thai	0.26	0.11	0.11	0.62	Girls	0.39	0.14	0.20	0.79
Affirmation	English	9.34	1.83	6.29	13.87	Boys	5.67	1.32	3.55	9.05
	Thai	3.84	0.78	2.56	5.78	Girls	6.33	1.37	4.10	9.78
Repetition	English	7.82	1.51	5.30	11.53	Boys	4.52	1.12	2.74	7.46
	Thai	3.13	0.66	2.05	4.79	Girls	5.42	1.22	3.44	8.53
Request for repetition	English	0.39	0.19	0.15	1.02	Boys	0.47	0.24	0.17	1.33
	Thai	0.19	0.12	0.05	0.68	Girls	0.16	0.10	0.04	0.57

Expansion	English	0.68	0.26	0.31	1.48	Boys	1.57	0.46	0.87	2.84
	Thai	1.86	0.54	1.04	3.32	Girls	0.81	0.30	0.38	1.70
Extension	English	0.34	0.16	0.13	0.88	Boys	0.20	0.11	0.07	0.60
	Thai	0.18	0.11	0.05	0.58	Girls	0.30	0.15	0.11	0.80
Recast	English	0.002	0.05	0.00	1.02e+20	Boys	0.003	0.09	0.00	1.80e+20
	Thai	0.43	0.26	0.13	1.00	Girls	0.25	0.15	0.07	1.00
Direct action request	English	3.75	0.72	2.55	5.52	Boys	3.64	0.70	2.47	5.36
	Thai	5.68	0.81	4.26	7.57	Girls	5.86	0.82	4.41	7.77
Indirect action request	English	3.34	0.70	2.19	5.11	Boys	1.61	0.49	0.87	2.99
	Thai	0.92	0.35	0.42	1.99	Girls	1.90	0.51	1.11	3.25

Attention directive	English	3.69	0.63	2.61	5.21	Boys	3.51	0.60	2.49	4.94
	Thai	5.53	0.82	4.10	7.45	Girls	5.80	0.79	4.41	7.64
Positive feedback	English	0.32	0.19	0.10	1.00	Boys	0.17	0.11	0.04	1.00
	Thai	2.90e-06	0.03	0.00	Inf	Girls	5.60e-06	0.07	0.00	Inf
Negative feedback	English	2.61	0.48	1.79	3.79	Boys	1.65	0.40	1.02	2.67
	Thai	1.01	0.25	0.61	1.68	Girls	1.60	0.37	1.00	2.56
Total utterances	English	81.70	6.79	69.10	96.60	Boys	60.10	6.57	48.30	74.90
	Thai	58.80	4.98	49.60	69.70	Girls	79.90	8.05	65.20	97.90
Total words	English	448.00	35.20	382.00	525.00	Boys	543.00	55.90	441.00	668.00
	Thai	847.00	66.60	723.00	992.00	Girls	699.00	66.70	576.00	847.00

Within Bilingual Comparisons (English Versus Thai): Child Results

Table 3A.20 Labels

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Children's Use of Labels During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.24	0.68	3.28	.001	**
Language	-0.49	0.22	-2.24	.03	*
Child Gender	0.15	0.27	0.55	.58	
Words	0.004	0.001	3.66	.0002	***
Exposure	-0.003	0.006	-0.43	.67	
Proficiency	-0.18	0.10	-1.77	.08	†
Language*Child Gender	0.36	0.31	1.16	.24	

Note. Formula: `label ~ lang_thai * gender_male + words + exposure + proficiency + (1 | participant).`

†*p* < .10, *p < .05, **p < .01, ***p < .001.

Table 3A.21 Descriptions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Children's Use of Descriptions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.92	1.27	3.10	.002	**
Language	0.16	0.36	0.46	.65	
Child Gender	0.31	0.42	0.73	.46	
Words	0.003	0.0002	1.60	.11	
Proficiency	-0.47	0.17	-2.76	.006	**
Language*Child Gender	-1.27	0.61	-2.09	.04	*

Note. Formula: `desc ~ lang_thai * gender_male + words + proficiency +`

`(1 | participant)`.

p < .05, **p* < .01.

Table 3A.22 Open-Ended Questions

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Open-Ended Questions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.71	0.34	2.11	.04	*
Language	-0.87	0.25	-3.46	.0005	***
Child Gender	-0.24	0.36	-0.66	.51	
Words	0.005	0.001	4.03	.00006	***
Language*Child Gender	-0.0007	0.43	-0.002	.99	

Note. Formula: `oq ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, ****p* < .001.

Table 3A.23 Closed-Ended Questions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual Children's Use of Closed-Ended Questions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.97	0.47	-2.06	.04	*
Language	-0.90	0.44	-2.04	.04	*
Child Gender	-0.12	0.55	-0.21	.83	
Words	0.009	0.002	5.61	1.98e-8	***
Language*Child Gender	-0.04	0.92	-0.04	.97	

Note. Formula: `cq ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, ****p* < .001.

Table 3A.24 Reframes

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Reframes During Book Sharing

Predictors	Estimate	SE	z	p	
Intercept	-3.24	1.49	-2.18	.03	*
Language	-9.56	76.30	-0.13	.90	
Child Gender	-12.56	569.20	-0.02	.98	
Words	0.007	0.006	1.32	.19	
Language*Child Gender	-1.77	118700.00	0.00	1.00	

Note. Formula: `reframe ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 3A.25 Affirmations

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Affirmations During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.44	0.53	-0.83	.41	
Language	-1.24	0.59	-2.12	.03	*
Child Gender	0.40	0.55	0.73	.46	
Words	0.008	0.003	3.18	.001	**
Language*Child Gender	0.06	0.87	0.06	.95	

Note. Formula: `aff ~ lang_thai * gender_male + words + (1 | participant)`.

p < .05, **p* < .01.

Table 3A.26 Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Repetitions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.17	0.60	-0.29	.77	
Language	-0.08	0.53	-0.15	.88	
Child Gender	0.34	0.61	0.56	.58	
Words	0.007	0.002	2.70	.007	**
Language*Child Gender	0.15	0.76	0.19	.85	

Note. Formula: `rep ~ lang_thai * gender_male + words + (1 | participant)`.

**$p < .01$.

Table 3A.27 Requests for Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Requests for Repetitions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-13.63	202.03	-0.07	.95
Language	-3.03	919.65	-0.003	.99
Child Gender	10.89	202.03	0.05	.96
Words	0.003	0.01	0.28	.78
Language*Child Gender	3.80	919.65	0.004	.99

Note. Formula: `reqrep ~ lang_thai * gender_male + words + (1 | participant).`

Table 3A.28 Expansions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Expansions During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.14	4.53	-0.25	.80	
Language	-2.86	2.93	-0.98	.33	
Child Gender	-6.59	48.15	-0.14	.89	
Words	0.02	0.01	1.96	.05	†
Exposure	-0.15	0.10	-1.55	.12	
Proficiency	0.24	0.87	0.28	.78	
Language*Child Gender	11.01	48.24	0.23	.82	

Note. Formula: `exp ~ lang_thai * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10.

Table 3A.29 Direct Action Requests

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Direct Action Requests During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.40	0.56	-0.73	.47	
Language	-1.09	0.46	-2.35	.02	*
Child Gender	0.08	0.45	0.17	.87	
Words	0.005	0.001	2.80	.005	**
Language*Child Gender	-0.13	0.83	-0.16	.87	

Note. Formula: `actdird ~ lang_thai * gender_male + words +(1 | participant)`.

p < .05, **p* < .01.

Table 3A.30 Indirect Action Requests

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Indirect Action Requests During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-4.61	1.82	-2.53	.01	*
Language	-0.08	1.16	-0.07	.94	
Child Gender	1.81	0.70	2.59	.01	
Words	0.001	0.001	1.45	.15	
Language*Child Gender	-2.53	1.57	-1.61	.11	

Note. Formula: `actdiri ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 3A.31 Attention Directives

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual

Children's Use of Attention Directives During Book Sharing

Predictors	Estimate	SE	z	p	
Intercept	-1.53	0.54	-2.83	.005	**
Language	0.27	0.42	0.64	.52	
Child Gender	0.41	0.56	0.73	.47	
Words	0.006	0.002	3.05	.002	**
Language*Child Gender	-0.39	0.64	-0.62	.54	

Note. Formula: `attdir ~ lang_thai * gender_male + words + (1 | participant)`.

**$p < .01$.

Table 3A.32 Positive Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Children's Use of

Positive Feedback During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-5.89	5.88	-1.00	.32
Language	-0.15	1.76	-0.09	.93
Child Gender	-20.81	52530.00	0.00	1.00
Words	0.01	0.009	1.13	.26
Language*Child Gender	-1.54	146500.00	0.00	1.00

Note. Formula: `pf ~ lang_thai * gender_male + words + (1 | participant).`

Table 3A.33 Negative Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual Children's Use of Negative Feedback During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.37	0.59	-2.34	.02	*
Language	-1.38	0.62	-2.24	.02	*
Child Gender	0.08	0.60	0.14	.89	
Words	0.006	0.003	2.44	.01	*
Language*Child Gender	0.07	1.01	0.07	.94	

Note. Formula: `nf ~ lang_thai * gender_male + words + (1 | participant)`.

*p < .05.

Table 3A.34 Number of Words

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of

Words Bilingual Children Produced During Book Sharing

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	4.68	0.24	19.50	<2e-16	***
Language	0.03	0.26	0.10	.92	
Child Gender	-0.24	0.35	-0.70	.48	
Language*Child Gender	-0.44	0.38	-1.15	.25	

Note. Formula: `words ~ lang_thai * gender_male + (1 | participant)`.

***$p < .001$.

Table 3A.35 Number of Utterances

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in the Number of

Utterances Bilingual Children Produced During Book Sharing

Predictors	Estimate	SE	z	p	
Intercept	3.72	0.20	18.57	<2e-16	***
Language	-0.17	0.22	-0.80	.43	
Child Gender	-0.24	0.29	-0.83	.41	
Language*Child Gender	-0.39	0.32	-1.22	.22	

Note. Formula: `utterances ~ lang_thai * gender_male + (1 | participant)`.

***$p < .001$.

Table 3A.36 Estimated Marginal Means

Estimated Marginal Means of Bilingual Children's Language Use During Book Sharing

Child linguistic measure	Language	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	3.68	0.52	2.78	4.88	Boys	3.71	0.67	2.58	5.34
	Thai	2.69	0.41	1.97	3.67	Girls	2.67	0.48	1.86	3.82
Description	English	2.36	0.56	1.46	3.81	Boys	1.58	0.40	0.95	2.62
	Thai	1.47	0.38	0.87	2.48	Girls	2.20	0.65	1.21	4.00
Open-ended question	English	3.17	0.68	2.06	4.88	Boys	1.82	0.49	1.05	3.14
	Thai	1.33	0.32	0.81	2.17	Girls	2.31	0.61	1.36	3.94

Closed-ended question	English	0.94	0.26	0.54	1.64	Boys	0.56	0.23	0.24	1.28
	Thai	0.38	0.16	0.16	0.91	Girls	0.64	0.23	0.31	1.31
Reframe	English	0.0002	0.05	2.22e-16	1.43e+245	Boys	1.00e-09	6.23e-05	2.22e-16	Inf
	Thai	4.71e-09	0.0003	2.22e-16	Inf	Girls	0.0007	0.03	2.22e-16	1.67e+30
Affirmation	English	1.90	0.56	1.05	3.45	Boys	1.28	0.48	0.60	2.73
	Thai	0.57	0.22	0.26	1.22	Girls	0.84	0.31	0.39	1.78
Repetition	English	2.00	0.64	1.06	3.80	Boys	2.45	0.78	1.29	4.66
	Thai	1.99	0.57	1.12	3.54	Girls	1.63	0.58	0.79	3.34
Request for repetition	English	0.0004	0.04	2.22e-16	8.42e+84	Boys	1.26e-01	0.08	0.03	0.00
	Thai	0.0001	0.05	2.22e-16	Inf	Girls	3.50e-07	0.0002	0.00	Inf

Expansion	English	0.0004	0.01	0.00	4.52e+17	Boys	0.001	0.02	0.00	9.83e+17
	Thai	0.01	0.01	2.94e-05	1.00	Girls	0.002	0.01	7.36e-06	1.00
Direct action request	English	1.21	0.41	0.61	2.37	Boys	0.68	0.28	0.30	1.54
	Thai	0.38	0.17	0.16	0.91	Girls	0.67	0.27	0.30	1.51
Indirect action request	English	0.0004	0.02	0.00	1.70e+45	Boys	0.001	0.05	0.00	3.17e+45
	Thai	0.05	0.04	0.01	0.00	Girls	0.02	0.03	0.002	0.00
Attention directive	English	0.53	0.17	0.28	1.01	Boys	0.61	0.23	0.29	1.31
	Thai	0.57	0.18	0.30	1.09	Girls	0.50	0.18	0.24	1.03
Positive feedback	English	2.53e-07	0.01	2.22e-16	Inf	Boys	0.00	2.40e-07	0.00	Inf
	Thai	1.00e-07	0.01	2.22e-16	Inf	Girls	0.01	0.04	6.73e-07	89.00

Negative feedback	English	0.52	0.17	0.26	1.01	Boys	0.28	0.14	0.10	0.76
	Thai	0.14	0.07	0.04	0.41	Girls	0.25	0.13	0.09	0.72
Total utterances	English	36.50	5.41	27.00	49.10	Boys	24.40	4.54	16.80	35.50
	Thai	25.30	3.86	18.60	34.40	Girls	37.80	6.48	26.80	53.30
Total words	English	95.70	17.00	67.00	137.00	Boys	68.80	15.00	44.40	107.00
	Thai	78.80	14.20	54.80	113.00	Girls	109.60	22.20	72.90	165.00

Bilingual Versus Monolingual Comparisons in English: Maternal Results

Table 3B.1 Labels

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Mothers' Use of Labels During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.92	1.51	0.61	.54	
Group	0.46	0.72	0.64	.52	
Child Gender	-0.92	0.37	-2.48	.01	*
Words	0.0006	0.0005	1.25	.21	
Exposure	0.002	0.009	0.27	.79	
Proficiency	0.01	0.11	0.12	.91	
Group*Child Gender	0.94	0.47	2.02	.04	*

Note. Formula: `label ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

p < .05.

Table 3B.2 Descriptions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Descriptions During Book Sharing (English

Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.91	1.86	1.03	.30	
Group	-0.97	0.72	-1.35	.18	
Child Gender	-0.12	0.36	-0.34	.74	
Words	0.001	0.0005	2.86	.004	**
Proficiency	-0.09	0.19	-0.47	.64	
Group*Child Gender	0.19	0.64	0.30	.77	

Note. Formula: `desc ~ group_biling * gender_male + words + proficiency +`

`(1 | participant).`

**p < .01.

Table 3B.3 Open-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Open-Ended Questions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.01	1.11	2.71	.007	**
Group	-0.35	0.54	-0.65	.52	
Child Gender	0.50	0.23	2.20	.03	*
Words	0.001	0.0003	3.52	.0004	***
Exposure	-0.0002	0.007	-0.03	.97	
Proficiency	-0.08	0.09	-0.94	.35	
Group*Child Gender	-0.44	0.31	-1.40	.16	

Note. Formula: `oq ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

p < .05, **p* < .01, ***p* < .001.

Table 3B.4 Closed-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Closed-Ended Questions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.52	1.23	2.86	.004	**
Group	-0.82	0.60	-1.38	.17	
Child Gender	0.18	0.24	0.72	.47	
Words	0.001	0.0003	2.96	.003	**
Exposure	-0.006	0.008	-0.82	.41	
Proficiency	-0.09	0.10	-0.94	.35	
Group*Child Gender	-0.36	0.34	-1.07	.29	

Note. Formula: `cq ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant)`.

**p < .01.

Table 3B.5 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Reframes During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.49	0.90	-1.65	.10
Group	0.45	0.75	0.60	.55
Child Gender	0.74	0.69	1.08	.28
Words	0.0004	0.0008	0.45	.65
Group*Child Gender	-0.39	0.90	-0.43	.67

Note. Formula: `reframe ~ group_biling * gender_male + words +`

`(1 | participant)`.

Table 3B.6 Affirmations

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Affirmations During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.29	1.77	1.29	.20	
Group	0.40	0.81	0.49	.62	
Child Gender	0.09	0.38	0.24	.81	
Words	0.001	0.0005	1.98	.05	†
Exposure	-0.005	0.01	-0.50	.62	
Proficiency	-0.08	0.13	-0.60	.55	
Group*Child Gender	-0.58	0.51	-1.13	.26	

Note. Formula: `aff ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

$†p < .10$.

Table 3B.7 Repetitions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Repetitions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.36	0.97	1.41	.16	
Group	0.26	0.34	0.76	.45	
Child Gender	0.06	0.28	0.23	.82	
Words	0.001	0.0004	3.04	.002	**
Proficiency	-0.02	0.10	-0.21	.84	
Group*Child Gender	-0.04	0.38	-0.11	.91	

Note. Formula: `rep ~ group_biling * gender_male + words + proficiency +`

`(1 | participant)`.

**p* < .01.

Table 3B.8 Requests for Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Requests for Repetitions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-6.07	3.82	-1.59	.11	
Group	3.04	1.69	1.80	.07	†
Child Gender	0.62	0.87	0.72	.47	
Words	0.002	0.001	1.72	.09	†
Exposure	0.04	0.02	2.15	.03	*
Proficiency	-0.15	0.27	-0.57	.57	
Group*Child Gender	-0.009	1.18	-0.01	.99	

Note. Formula: `reqrep ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant).`

†*p* < .10, *p < .05.

Table 3B.9 Recasts

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Mothers' Use of Recasts During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.10	6.38	-0.17	.86
Group	-0.11	2.73	0.04	.97
Child Gender	-0.77	0.79	-0.98	.33
Words	0.0004	0.001	0.33	.75
Exposure	0.06	0.05	1.26	.21
Proficiency	-0.63	0.67	-0.94	.35
Group*Child Gender	-20.33	15840.00	-0.001	.99

Note. Formula: `recast ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

†*p* < .10.

Table 3B.10 Expansions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Expansions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.59	2.04	0.78	.44	
Group	-2.01	0.87	-2.32	.02	*
Child Gender	-0.78	0.55	-1.42	.16	
Words	0.003	0.0007	3.55	.0004	***
Proficiency	-0.36	0.21	-1.69	.09	†
Group*Child Gender	2.32	0.92	2.51	.01	*

Note. Formula: `exp ~ group_biling * gender_male + words + proficiency +`

`(1 | participant)`.

†*p* < .10, *p < .05, ***p < .001.

Table 3B.11 Extensions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Extensions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.98	2.31	-0.86	.39	
Group	-0.66	0.78	-0.85	.40	
Child Gender	-0.26	0.37	-0.72	.47	
Words	0.002	0.0005	3.87	.0001	***
Proficiency	0.11	0.25	0.45	.65	
Group*Child Gender	0.04	0.81	0.05	.96	

Note. Formula: `ext ~ group_biling * gender_male + words + proficiency +`

`(1 | participant)`.

***$p < .001$.

Table 3B.12 Direct Action Requests

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Direct Action Requests During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.48	1.59	2.20	.03	*
Group	-1.30	0.83	-1.57	.12	
Child Gender	0.02	0.28	0.06	.95	
Words	0.001	0.0004	3.18	.001	**
Exposure	-0.02	0.01	-1.72	.09	†
Proficiency	-0.09	0.12	-0.73	.47	
Group*Child Gender	-0.78	0.42	-1.84	.07	†

Note. Formula: `actdird ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, *p < .05, **p < .01.

Table 3B.13 Indirect Action Requests

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Mothers' Use of Indirect Action Requests During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.02	0.71	-1.44	.15	
Group	0.86	0.50	1.74	.08	†
Child Gender	-0.50	0.51	-0.97	.33	
Words	0.002	0.0007	2.50	.01	*
Group*Child Gender	0.36	0.66	0.55	.58	

Note. Formula: `actdiri ~ group_biling * gender_male + words +`

`(1 | participant).`

†*p* < .10, *p < .01.

Table 3.B14 Attention Directives

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Attention Directives During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.41	2.72	-0.52	.61	
Group	1.44	1.18	1.22	.22	
Child Gender	0.61	0.50	1.21	.22	
Words	0.0006	0.0007	0.96	.34	
Exposure	0.003	0.02	0.21	.83	
Proficiency	0.13	0.20	0.67	.50	
Group*Child Gender	-1.34	0.70	-1.92	.06	†

Note. Formula: `attdir ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†$p < .10$.

Table 3B.15 Positive Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Positive Feedback During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.66	3.32	-0.50	.62	
Group	0.40	1.50	0.26	.79	
Child Gender	0.08	0.47	0.16	.87	
Words	0.002	0.001	1.86	.06	†
Exposure	0.02	0.02	1.04	.30	
Proficiency	-0.19	0.26	-0.76	.45	
Group*Child Gender	-0.53	0.90	-0.59	.55	

Note. Formula: `pf ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10.

Table 3B.16 Negative Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Negative Feedback During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	0.10	0.56	0.17	.87
Group	-0.02	0.37	-0.07	.95
Child Gender	-0.25	0.36	0.70	.49
Words	0.0008	0.0006	1.48	.14
Group*Child Gender	0.79	0.50	1.59	.11

Note. Formula: `nf ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3B.17 Number of Words

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Words

Bilingual and Monolingual Mothers Produced During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.83	0.72	9.46	<2e-16	***
Group	-0.70	0.35	-2.03	.04	*
Child Gender	0.11	0.16	0.70	.49	
Exposure	-0.007	0.004	-1.48	.14	
Proficiency	0.04	0.06	0.69	.49	
Group*Child Gender	-0.34	0.22	-1.55	.12	

Note. Formula: `words ~ group_biling * gender_male + exposure + proficiency +`

`(1 | participant)`.

p < .05, ****p* < .001.

Table 3B.18 Number of Utterances

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Utterances

Bilingual and Monolingual Mothers Produced During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	4.51	0.70	6.45	1.13e-10	***
Group	-0.14	0.33	-0.43	0.67	
Child Gender	0.25	0.16	1.59	.11	
Exposure	-0.001	0.004	-0.29	.78	
Proficiency	0.02	0.06	0.42	.68	
Group*Child Gender	-0.47	0.21	-2.24	.03	*

Note. Formula: `utterances ~ group_biling * gender_male + exposure + proficiency + (1 | participant)`.

p < .05, ****p* < .001.

Table 3B.19 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Maternal Linguistic Measures During Book Sharing (English Session)

Maternal linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	2.94	1.43	1.10	7.86	Boys	3.74	0.95	2.23	6.27
	Bilingual	7.44	2.46	3.80	14.56	Girls	5.85	1.37	3.64	9.42
Description	Monolingual	7.34	2.32	3.87	13.91	Boys	4.68	1.00	3.04	7.21
	Bilingual	3.07	1.06	1.53	6.16	Girls	4.81	1.00	3.16	7.33
Open-ended question	Monolingual	26.90	8.33	14.32	50.40	Boys	23.30	2.71	18.40	29.50
	Bilingual	15.30	3.61	9.44	24.70	Girls	17.60	2.05	13.90	22.30

Closed-ended question	Monolingual	22.24	7.72	11.01	44.90	Boys	13.40	1.72	10.40	17.40
	Bilingual	8.14	2.20	4.72	14.10	Girls	13.50	1.69	10.50	17.40
Reframe	Monolingual	0.41	0.17	0.18	0.93	Boys	0.61	0.16	0.35	1.05
	Bilingual	0.53	0.15	0.29	0.95	Girls	0.35	0.13	0.17	0.74
Affirmation	Monolingual	7.06	3.54	2.55	19.50	Boys	6.76	1.22	4.68	9.76
	Bilingual	7.90	2.99	3.67	17.00	Girls	8.24	1.56	5.62	12.09
Repetition	Monolingual	7.15	1.46	4.73	10.80	Boys	8.24	1.15	6.21	10.90
	Bilingual	9.08	1.56	6.41	12.90	Girls	7.89	1.02	6.08	10.20
Request for repetition	Monolingual	0.05	0.06	0.004	0.55	Boys	0.29	0.16	0.09	0.91
	Bilingual	0.98	0.64	0.26	3.68	Girls	0.16	0.09	0.05	0.53

Expansion	Monolingual	0.85	0.38	0.34	2.10	Boys	0.67	0.20	0.36	1.24
	Bilingual	0.36	0.17	0.14	0.95	Girls	0.46	0.17	0.22	0.98
Extension	Monolingual	0.94	0.41	0.38	2.30	Boys	0.60	0.23	0.28	1.29
	Bilingual	0.50	0.24	0.19	1.30	Girls	0.77	0.26	0.39	1.52
Recast	Monolingual	0.10	0.19	0.002	5.00	Boys	2.69e-06	0.02	0.00	Inf
	Bilingual	4.17e-06	0.03	0.00	Inf	Girls	0.15	0.14	0.02	1.00
Direct action request	Monolingual	10.70	5.05	4.11	27.84	Boys	3.82	0.61	2.77	5.27
	Bilingual	1.98	0.78	0.90	4.38	Girls	5.54	0.80	4.13	7.43
Indirect action request	Monolingual	0.88	0.27	0.48	1.64	Boys	1.27	0.31	0.78	2.08
	Bilingual	2.50	0.56	1.59	3.94	Girls	1.74	0.39	1.10	2.75

Attention directive	Monolingual	1.78	1.27	0.42	7.58	Boys	2.53	0.61	1.56	4.12
	Bilingual	3.83	2.05	1.30	11.31	Girls	2.69	0.71	1.59	4.58
Positive feedback	Monolingual	0.46	0.47	0.06	3.67	Boys	0.45	0.21	0.17	1.17
	Bilingual	0.53	0.35	0.14	2.01	Girls	0.55	0.24	0.22	1.33
Negative feedback	Monolingual	1.63	0.40	1.00	2.68	Boys	2.11	0.38	1.47	3.04
	Bilingual	2.37	0.41	1.67	3.36	Girls	1.83	0.36	1.23	2.73
Total utterances	Monolingual	115.40	22.40	77.90	171.00	Boys	96.40	7.57	82.30	113.00
	Bilingual	79.20	11.70	58.80	107.00	Girls	94.80	7.27	81.20	111.00
Total words	Monolingual	907.00	181.90	604.00	1361.00	Boys	572.00	46.60	485.00	675.00
	Bilingual	381.00	57.80	280.00	517.00	Girls	603.00	47.90	514.00	709.00

Bilingual Versus Monolingual Comparisons in English: Child Results

Table 3B.20 Labels

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Children's Use of Labels During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	3.36	1.48	2.27	.02	*
Group	-0.08	0.75	-0.10	.92	
Child Gender	-1.33	0.47	-2.82	.005	**
Words	0.0008	0.001	0.62	.54	
Exposure	0.009	0.01	0.64	.52	
Proficiency	-0.33	0.16	-2.05	.04	*
Group*Child Gender	1.36	0.57	2.38	.02	*

Note. Formula: `label ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

p < .05, **p* < .01.

Table 3B.21 Descriptions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Descriptions During Book Sharing (English Session) by Group, Child Gender, Number of Words Produced and Interactions Between Group and Child Gender

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.88	0.72	-2.61	.009	**
Group	0.58	0.65	0.89	.37	
Child Gender	0.62	0.61	1.03	.30	
Words	0.008	0.002	4.78	.000002	***
Group*Child Gender	0.39	0.78	0.50	.62	

Note. Formula: `desc ~ group_biling * gender_male + words + (1 | participant)`.

**p < .01, ***p < .001.

Table 3B.22 Open-Ended Questions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Children's Use of Open-Ended Questions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.82	1.95	-0.93	.35	
Group	1.55	0.84	1.83	.07	†
Child Gender	-0.93	0.56	-1.66	.10	
Words	0.003	0.002	1.63	.10	
Exposure	0.04	0.02	2.10	.04	*
Proficiency	-0.09	0.19	-0.47	.64	
Group*Child Gender	0.83	0.71	1.17	.24	

Note. Formula: `oq ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant).`

†*p* < .10, **p* < .05.

Table 3B.23 Closed-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Closed-Ended Questions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-7.22	2.63	-2.75	.006	**
Group	3.83	1.05	3.63	.0003	***
Child Gender	0.62	0.62	1.00	.32	
Words	0.004	0.002	2.73	.006	**
Exposure	0.08	0.02	3.41	.0006	***
Proficiency	-0.22	0.21	-1.06	.29	
Group*Child Gender	-0.65	0.87	-0.75	.46	

Note. Formula: `cq ~ group_biling * gender_male + words + exposure +`

`proficiency + (1 | participant)`.

p < .05, **p* < .01, ***p* < .001.

Table 3B.24 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Reframes During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-13.20	64.91	-0.20	.84
Group	9.96	6.49	0.15	.88
Child Gender	-7.83	3306.00	-0.002	.99
Words	0.007	0.006	1.32	.19
Group*Child Gender	-4.56	3341.00	-0.001	.99

Note. Formula: `reframe ~ group_biling * gender_male + words +`

`(1 | participant).`

Table 3B.25 Affirmations

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Affirmations During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.33	0.49	-0.67	.50	
Group	0.27	0.49	0.56	.58	
Child Gender	-0.71	0.54	-1.30	0.19	
Words	0.003	0.001	2.41	.02	*
Group*Child Gender	1.02	0.71	1.43	.15	

Note. Formula: `aff ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05.

Table 3B.26 Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Repetitions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-0.83	0.68	-1.22	.22
Group	0.70	0.65	1.09	.28
Child Gender	-0.20	0.69	-0.29	.77
Words	0.002	0.002	0.94	.35
Group*Child Gender	0.65	0.88	0.74	.46

Note. Formula: `rep ~ group_biling * gender_male + words + (1 | participant).`

Table 3B.27 Requests for Repetitions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Requests for Repetitions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-13.51	410.00	-0.03	.97
Group	-5.27	4134.00	-0.001	.99
Child Gender	12.71	410.00	0.03	.98
Words	-0.005	0.008	-0.61	.54
Group*Child Gender	3.99	4134.00	0.001	.99

Note. Formula: `reqrep ~ group_biling * gender_male + words + (1 | participant)`.

Table 3B.28 Recasts

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Recasts During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-4.34	2.79	-1.55	.12
Group	0.05	1.73	0.03	.98
Child Gender	-9.15	92.83	-0.10	.92
Words	0.005	0.005	0.88	.38
Group*Child Gender	-2.38	450.59	-0.005	.99

Note. Formula: `recast ~ group_biling * gender_male + words +`

`(1 | participant).`

Table 3B.29 Expansions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Expansions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-13.45	112.40	-0.12	.91
Group	8.99	112.40	0.08	.94
Child Gender	-6.15	2349.00	-0.003	.99
Words	0.002	0.01	0.17	.87
Group*Child Gender	-3.43	2354.00	-0.001	.99

Note. Formula: `exp ~ group_biling * gender_male + words + (1 | participant).`

Table 3B.30 Extensions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Extensions During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-53.63	167.14	-0.32	.75
Group	27.23	159.88	0.17	.87
Child Gender	10.14	158.62	0.06	.95
Words	0.07	0.09	0.83	.41
Group*Child Gender	-9.79	734.80	-0.01	.99

Note. Formula: `ext ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05.

Table 3B.31 Direct Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Direct Action Requests During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.19	1.61	-0.12	.91	
Group	0.32	0.70	0.46	.65	
Child Gender	-0.80	0.44	-1.81	.07	†
Words	0.005	0.001	4.09	.00004	***
Exposure	0.01	0.01	0.92	.36	
Proficiency	-0.20	0.16	-1.25	.21	
Group*Child Gender	0.73	0.61	1.19	.23	

Note. Formula: `actdird ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, ****p* < .001.

Table 3B.32 Indirect Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Indirect Action Requests During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-3.89	6.41	-0.61	.54
Group	-2.14	3.12	-0.69	.49
Child Gender	-0.22	33210.00	-0.001	.99
Words	0.002	0.002	0.95	.34
Exposure	-0.02	0.06	-0.34	.73
Proficiency	0.54	0.48	1.11	.27
Group*Child Gender	0.82	61880.00	0.00	1.00

Note. Formula: `actdiri ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

Table 3B.33 Attention Directives

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Attention Directives During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.00	2.24	0.45	.66	
Group	0.76	1.07	0.71	.48	
Child Gender	-1.90	0.84	-2.25	.02	*
Words	0.006	0.002	2.98	.003	**
Exposure	0.03	0.02	1.14	.25	
Proficiency	-0.61	0.26	-2.34	.02	*
Group*Child Gender	2.15	1.01	2.13	.03	*

Note. Formula: `attdir ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

p < .05, **p* < .01.

Table 3B.34 Positive Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Positive Feedback During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-7.09	4.70	-1.51	.13
Group	0.34	2.98	0.11	.91
Child Gender	-0.20	39520.00	0.00	1.00
Words	0.005	0.01	0.50	.62
Group*Child Gender	-2.49	175600.00	0.00	1.00

Note. Formula: `pf ~ group_biling * gender_male + words + (1 | participant)`.

Table 3B.35 Negative Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Negative Feedback During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.32	0.72	-1.83	.07	†
Group	0.62	0.66	0.94	.35	
Child Gender	0.09	0.69	0.13	.89	
Words	0.002	0.002	1.10	0.27	
Group*Child Gender	-0.30	0.91	-0.33	.74	

Note. Formula: `nf ~ group_biling * gender_male + words + (1 | participant)`.

†*p* < .10.

Table 3B.36 Number of Words

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Words

Bilingual and Monolingual Children Produced During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.20	1.07	2.05	.04	*
Group	1.22	0.55	2.23	.03	*
Child Gender	0.10	0.33	0.30	.77	
Exposure	0.04	0.01	3.92	.00009	***
Proficiency	-0.09	0.11	-0.87	0.38	
Group*Child Gender	-0.33	0.43	-0.77	.44	

Note. Formula: `words ~ group_biling * gender_male + exposure + proficiency +`

`(1 | participant)`.

p < .05, ****p* < .001.

Table 3B.37 Number of Utterances

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Utterances

Bilingual and Monolingual Children Produced During Book Sharing (English Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.01	0.82	2.45	.01	*
Group	0.85	0.42	2.02	.04	*
Child Gender	0.11	0.25	0.43	.67	
Exposure	0.02	0.007	3.30	.001	**
Proficiency	-0.05	0.08	-0.63	0.53	
Group*Child Gender	-0.35	0.33	-1.06	0.29	

Note. Formula: `utterances ~ group_biling * gender_male + exposure + proficiency + (1 | participant)`.

*p < .05, **p < .01.

Table 3B.38 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Book Sharing (English Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	2.59	1.13	1.07	6.28	Boys	2.53	0.58	1.59	4.03
	Bilingual	4.74	1.59	2.40	9.36	Girls	4.84	0.92	3.29	7.13
Description	Monolingual	0.75	0.27	0.37	1.53	Boys	1.66	0.42	0.99	2.76
	Bilingual	1.62	0.42	0.95	2.74	Girls	0.73	0.25	0.37	1.44
Open-ended question	Monolingual	0.95	0.56	0.29	3.14	Boys	1.94	0.66	0.98	3.87
	Bilingual	6.72	2.71	2.97	15.20	Girls	3.27	1.08	1.68	6.39

Closed-ended question	Monolingual	0.09	0.07	0.02	0.42	Boys	0.60	0.23	0.27	1.31
	Bilingual	2.98	1.25	1.27	6.98	Girls	0.45	0.18	0.19	1.03
Reframe	Monolingual	1.22e-07	0.0002	2.22e-16	Inf	Boys	3.62e-08	6.05e-05	2.22e-16	Inf
	Bilingual	2.64e-04	0.06	2.22e-16	2.77e+20	Girls	8.85e-04	0.03	2.22e-16	2.55e+25
Affirmation	Monolingual	0.86	0.27	0.46	1.60	Boys	1.15	0.32	0.66	2.00
	Bilingual	1.89	0.46	1.16	3.07	Girls	1.41	0.36	0.85	2.35
Repetition	Monolingual	0.53	0.21	0.24	1.16	Boys	0.95	0.31	0.49	1.81
	Bilingual	1.48	0.45	0.81	2.72	Girls	0.83	0.28	0.42	1.64
Request for repetition	Monolingual	3.65e-04	0.07	2.22e-16	4.23e+176	Boys	1.11e-01	7.46e-02	0.03	0
	Bilingual	1.38e-05	0.03	2.22e-16	Inf	Girls	5.00e-08	9.41e-05	0.00	Inf

Expansion	Monolingual	9.33e-08	0.0001	2.22e-16	Inf	Boys	6.97e-08	0.0001	2.22e-16	Inf
	Bilingual	1.36e-04	0.01	2.22e-16	1.66e+67	Girls	1.81e-04	0.01	2.22e-16	4.56e+45
Extension	Monolingual	0.00	0.00	2.22e-16	2.08e+61	Boys	1.16e-10	4.17e-08	2.22e-16	1.06e+305
	Bilingual	5.99e-07	0.0002	2.22e-16	Inf	Girls	6.16e-13	5.19e-11	2.22e-16	4.34e+61
Recast	Monolingual	0.0003	0.01	2.22e-16	1.62e+37	Boys	9.35e-07	0.0002	0.00	3.75e+191
	Bilingual	0.0001	0.02	2.22e-16	2.17e+189	Girls	0.03	0.06	0.0004	2.00
Direct action request	Monolingual	0.69	0.33	0.26	1.81	Boys	0.78	0.22	0.44	1.39
	Bilingual	1.36	0.47	0.68	2.73	Girls	1.20	0.31	0.72	2.01
Indirect action request	Monolingual	6.85e-06	0.11	2.22e-16	Inf	Boys	0.00	1.68e-06	0.00	Inf
	Bilingual	1.22e-06	0.03	2.22e-16	Inf	Girls	0.15	0.10	0.04	1

Attention directive	Monolingual	0.14	0.11	0.03	0.69	Boys	0.22	0.11	0.08	0.63
	Bilingual	0.85	0.40	0.32	2.22	Girls	0.51	0.21	0.23	1.16
Positive feedback	Monolingual	7.31e-08	0.001	2.22e-16	Inf	Boys	0.00	8.90e-08	0.00	Inf
	Bilingual	2.96e-08	0.003	2.22e-16	Inf	Girls	0.002	0.008	8.67e-07	5.00
Negative feedback	Monolingual	0.39	0.17	0.16	0.93	Boys	0.47	0.18	0.23	1.00
	Bilingual	0.62	0.22	0.30	1.26	Girls	0.50	0.19	0.23	1.09
Total utterances	Monolingual	28.70	6.81	17.80	46.40	Boys	38.90	4.74	30.40	49.80
	Bilingual	56.20	10.50	38.50	82.00	Girls	41.50	4.82	32.80	52.50
Total words	Monolingual	62.20	19.20	33.30	116.00	Boys	102.00	16.20	74.00	141.00
	Bilingual	179.00	43.80	109.10	294.00	Girls	109.00	16.50	80.30	148.00

Bilingual Versus Monolingual Comparisons in Thai: Maternal Results

Table 3C.1 Labels

Results of a Zero-Inflated Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Labels During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.14	0.28	4.14	.00003	***
Language	-0.10	0.23	-0.41	.68	
Child Gender	0.03	0.25	0.11	.91	
Words	0.0004	0.0002	2.25	.02	*
Language*Child Gender	0.33	0.34	0.97	.33	

Note. Formula: `label ~ group_biling * gender_male + words +`
`(1 | participant)`.

p < .05, ****p* < .001.

Table 3C.2 Descriptions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in

Bilingual and Monolingual Mothers' Use of Descriptions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.02	0.48	0.04	.97	
Group	-0.13	0.44	-0.30	.77	
Child Gender	0.31	0.47	0.68	.50	
Words	0.002	0.0004	4.55	.000005	***
Group*Child Gender	0.08	0.64	0.12	.90	

Note. Formula: `desc ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3C.3 Open-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Open-Ended Questions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.56	0.24	10.57	<2e-16	***
Group	-0.18	0.21	-0.86	.39	
Child Gender	0.04	0.22	0.16	.87	
Words	0.001	0.0002	4.87	.000001	***
Group*Child Gender	0.11	0.30	0.36	.72	

Note. Formula: `oq ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3C.4 Closed-Ended Questions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Closed-Ended Questions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.46	0.25	9.75	<2e-16	***
Group	-0.29	0.20	-1.46	.15	
Child Gender	0.009	0.21	0.05	.96	
Words	0.001	0.0002	5.18	.0000002	***
Group*Child Gender	-0.06	0.30	-0.21	.83	

Note. Formula: `cq ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3C.5 Reframes

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Reframes During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-1.37	1.20	-1.13	.26
Group	-0.10	0.66	-0.15	.88
Child Gender	0.30	0.64	0.47	.64
Words	0.0006	0.0009	0.68	.49
Group*Child Gender	-0.89	1.09	-0.81	.42

Note. Formula: `reframe ~ group_biling * gender_male + words +`

`(1 | participant)`.

Table 3C.6 Affirmations

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Affirmations During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.51	0.40	1.27	.21	
Group	0.03	0.34	0.10	.92	
Child Gender	-0.89	0.40	-2.25	.02	*
Words	0.001	0.0003	3.55	.0004	***
Group*Child Gender	0.83	0.54	1.54	.12	

Note. Formula: `aff ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05, ***p < .001.

Table 3C.7 Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Mothers' Use of Repetitions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.38	0.44	3.15	.002	**
Group	-0.68	0.35	-1.92	.06	†
Child Gender	-0.36	0.38	-0.95	.34	
Words	0.001	0.0004	3.03	.002	**
Group*Child Gender	0.12	0.54	0.22	.83	

Note. Formula: `rep ~ group_biling * gender_male + words + (1 | participant)`.

†$p < .10$, **$p < .01$.

Table 3C.8 Requests for Repetitions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Requests for Repetitions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.66	1.15	-1.44	.15	
Group	-1.24	0.86	-1.45	.15	
Child Gender	-0.61	0.78	-0.79	.43	
Words	0.001	0.001	1.10	.27	
Group*Child Gender	2.07	1.21	1.71	.09	†

Note. Formula: `reqrep ~ group_biling * gender_male + words + (1 | participant)`.

†*p* < .10.

Table 3C.9 Recasts

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Recasts During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.95	1.18	-2.51	.01	*
Group	1.99	1.07	1.86	.06	†
Child Gender	0.78	1.24	0.63	.53	
Words	0.0005	0.0005	0.91	.36	
Group*Child Gender	-0.97	1.37	-0.71	.48	

Note. Formula: `recast ~ group_biling * gender_male + words +`

`(1 | participant)`.

†*p* < .10, *p < .05.

Table 3C.10 Expansions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Mothers' Use of Expansions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.65	0.55	1.18	.24	
Group	-0.99	0.40	-2.50	.01	*
Child Gender	-0.59	0.40	-1.47	.14	
Words	0.0007	0.0005	1.28	.20	
Group*Child Gender	0.39	0.66	0.59	.55	

Note. Formula: `exp ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05.

Table 3C.11 Extensions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Extensions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-13.98	7.59	-1.84	.07	†
Group	2.53	1.62	1.56	.12	
Child Gender	-0.13	0.98	-0.13	.90	
Words	0.002	0.001	1.56	.12	
Exposure	0.12	0.06	2.06	.04	*
Proficiency	-0.03	0.45	-0.07	.94	
Group*Child Gender	-0.26	1.40	-0.19	.85	

Note. Formula: `ext ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, **p* < .05.

Table 3C.12 Direct Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Direct Action Requests During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.44	0.35	1.27	.21	
Group	0.76	0.27	2.85	.004	**
Child Gender	0.41	0.29	1.40	.16	
Words	0.0008	0.0003	3.20	.001	**
Group*Child Gender	-0.57	0.39	-1.47	.14	

Note. Formula: `actdird ~ group_biling * gender_male + words + (1 | participant)`.

**$p < .01$.

Table 3C.13 Indirect Action Requests

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Indirect Action Requests During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.71	2.13	-0.33	.74	
Group	-1.41	0.51	-2.73	.006	**
Child Gender	0.33	0.36	0.91	0.36	
Words	0.001	0.0003	3.91	.00009	***
Exposure	-0.008	0.01	-0.56	.58	
Proficiency	0.18	0.18	1.00	0.32	
Group*Child Gender	-0.89	0.61	-1.44	.15	

Note. Formula: `actdiri ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

**p < .01, ***p < .001.

Table 3C.14 Attention Directives

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Mothers' Use of Attention Directives During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	1.33	0.28	4.82	.000001	***
Group	-0.10	0.23	-0.43	.67	
Child Gender	0.15	0.25	0.61	.55	
Words	0.0009	0.0002	4.27	.00002	***
Group*Child Gender	-0.54	0.35	-1.52	.13	

Note. Formula: `attdir ~ group_biling * gender_male + words +`

`(1 | participant).`

***$p < .001$.

Table 3C.15 Positive Feedback

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Mothers' Use of Positive Feedback During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.78	5.54	-0.14	.89	
Group	-11.05	37.71	-0.29	.77	
Child Gender	-1.45	0.70	-2.07	.04	*
Words	0.0009	0.0009	1.00	.32	
Exposure	-0.02	0.03	-0.71	.48	
Proficiency	0.24	0.44	0.55	.59	
Group*Child Gender	9.69	37.71	0.26	.80	

Note. Formula: `pf ~ group_biling * gender_male + words + proficiency +`

`(1 | participant)`.

*p < .05.

Table 3C.16 Negative Feedback

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Mothers' Use of Negative Feedback During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-5.31	3.06	-1.73	.08	†
Group	0.24	0.66	0.36	.72	
Child Gender	-1.01	0.58	-1.74	.08	†
Words	0.001	0.0005	2.54	.01	*
Exposure	0.003	0.02	0.19	.85	
Proficiency	0.51	0.25	2.05	.04	*
Group*Child Gender	-0.23	0.75	-0.31	.76	

Note. Formula: `nf ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

†*p* < .10, **p* < .05.

Table 3C.17 Number of Words

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Words

Bilingual and Monolingual Mothers Produced During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.77	0.12	56.45	<2e-16	***
Group	0.07	0.16	0.42	.67	
Child Gender	0.10	0.17	0.55	.58	
Group*Child Gender	-0.35	0.23	-1.49	.14	

Note. Formula: `words ~ group_biling * gender_male + (1 | participant)`.

***$p < .001$.

Table 3C.18 Number of Utterances

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Utterances

Bilingual and Monolingual Mothers Produced During Book Sharing (Thai Session)

Predictors	Estimate	SE	z	p	
Intercept	4.56	0.12	36.71	<2e-16	***
Group	-0.35	0.17	-2.08	.04	*
Child Gender	-0.01	0.18	-0.06	.95	
Group*Child Gender	-0.32	0.24	-1.32	.19	

Note. Formula: `utterances ~ group_biling * gender_male + (1 | participant)`.

p < .05, ****p* < .001.

Table 3C.19 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Maternal Linguistic Measures During Book Sharing (Thai Session)

Maternal linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	4.95	0.66	3.79	6.46	Boys	5.64	0.72	4.35	7.31
	Bilingual	5.31	0.63	4.18	6.73	Girls	4.65	0.59	3.60	6.01
Description	Monolingual	5.58	1.77	2.95	10.58	Boys	6.37	1.95	3.44	11.81
	Bilingual	5.10	1.29	3.06	8.51	Girls	4.47	1.21	2.58	7.73
Open-ended question	Monolingual	32.30	3.56	25.90	40.30	Boys	31.80	3.45	25.50	39.60
	Bilingual	28.60	2.87	23.30	35.00	Girls	29.10	3.02	23.60	35.80

Closed-ended question	Monolingual	30.10	3.33	24.10	37.70	Boys	25.30	3.12	19.70	32.50
	Bilingual	21.80	2.52	17.20	27.50	Girls	25.90	2.87	20.70	32.40
Reframe	Monolingual	0.52	0.27	0.19	1.47	Boys	0.37	0.19	0.13	1.06
	Bilingual	0.30	0.16	0.10	0.91	Girls	0.43	0.23	0.14	1.28
Affirmation	Monolingual	3.06	0.63	2.03	4.63	Boys	3.02	0.61	2.01	4.54
	Bilingual	4.80	0.82	3.40	6.78	Girls	4.87	0.86	3.41	6.96
Repetition	Monolingual	9.50	1.82	6.45	14.00	Boys	6.00	1.16	4.06	8.87
	Bilingual	5.12	0.93	3.55	7.40	Girls	8.12	1.44	5.67	11.61
Request for repetition	Monolingual	0.35	0.17	0.13	0.94	Boys	0.39	0.19	0.15	1.01
	Bilingual	0.28	0.16	0.09	0.88	Girls	0.26	0.15	0.08	0.84

Expansion	Monolingual	2.80	0.55	1.88	4.17	Boys	1.54	0.36	0.97	2.46
	Bilingual	1.26	0.28	0.80	1.98	Girls	2.29	0.44	1.56	3.37
Extension	Monolingual	0.04	0.05	0.003	0.48	Boys	0.11	0.09	0.02	0.53
	Bilingual	0.43	0.24	0.14	1.31	Girls	0.15	0.09	0.04	0.53
Recast	Monolingual	0.12	0.08	0.03	0.47	Boys	0.30	0.15	0.11	0.81
	Bilingual	0.54	0.21	0.25	1.17	Girls	0.22	0.13	0.07	0.74
Direct action request	Monolingual	4.20	0.65	3.07	5.73	Boys	5.65	0.79	4.25	7.50
	Bilingual	6.72	0.83	5.24	8.62	Girls	4.99	0.70	3.76	6.63
Indirect action request	Monolingual	6.39	1.67	3.76	10.85	Boys	2.40	0.58	1.48	3.90
	Bilingual	1.01	0.29	0.56	1.81	Girls	2.68	0.55	1.77	4.05

Attention directive	Monolingual	9.72	1.21	7.56	12.50	Boys	7.61	1.00	5.85	9.91
	Bilingual	6.73	0.83	5.24	8.62	Girls	8.58	1.03	6.74	10.92
Positive feedback	Monolingual	0.79	0.50	0.22	3.00	Boys	0.19	0.10	0.07	1.00
	Bilingual	0.002	0.03	0.00	6.02e+13	Girls	0.01	0.12	0.00	2.44e+14
Negative feedback	Monolingual	1.30	0.49	0.61	2.77	Boys	0.78	0.25	0.41	1.49
	Bilingual	1.46	0.46	0.77	2.77	Girls	2.42	0.57	1.50	3.90
Total utterances	Monolingual	94.60	8.50	78.90	113.40	Boys	67.20	6.01	56.10	80.50
	Bilingual	56.80	4.71	48.10	67.20	Girls	80.00	6.68	67.50	94.60
Total words	Monolingual	910.00	79.00	764.00	1085.00	Boys	830.00	70.60	699.00	985.00
	Bilingual	818.00	64.00	699.00	958.00	Girls	898.00	71.90	764.00	1055.00

Bilingual Versus Monolingual Comparisons in Thai: Child Results

Table 3C.20 Labels

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Labels During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.68	0.30	2.26	.02	*
Language	-0.41	0.34	-1.21	.23	
Child Gender	-0.09	0.36	-0.26	.79	
Words	0.004	0.001	3.15	.002	**
Language*Child Gender	0.79	0.50	1.60	.11	

Note. Formula: `label ~ group_biling * gender_male + words + (1 | participant)`.

p < .05, **p* < .01.

Table 3C.21 Descriptions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Descriptions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-0.44	0.67	-0.66	.51	
Group	-0.14	0.57	-0.25	.81	
Child Gender	-0.34	0.60	-0.57	.57	
Words	0.006	0.003	2.40	.02	*
Group*Child Gender	-0.09	0.91	-0.10	.92	

Note. Formula: `desc ~ group_biling * gender_male + words + (1 | participant)`.

*p < .05.

Table 3C.22 Open-Ended Questions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and

Monolingual Children's Use of Open-Ended Questions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.44	0.35	1.25	.21	
Group	-0.58	0.39	-1.52	.13	
Child Gender	0.28	0.39	0.72	.47	
Words	0.006	0.002	3.62	.0003	***
Group*Child Gender	-0.45	0.59	-0.76	.45	

Note. Formula: `oq ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3C.23 Closed-Ended Questions

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Closed-Ended Questions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	2.45	1.67	1.47	.14	
Group	-2.05	0.94	-2.18	.03	*
Child Gender	-0.25	0.50	-0.49	.62	
Words	0.005	0.002	2.98	.003	**
Exposure	-0.04	0.02	-2.27	.02	*
Proficiency	0.04	0.13	0.31	.76	
Group*Child Gender	-0.53	0.90	-0.59	.56	

Note. Formula: `cq ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

p < .05, ***p* < .01.

Table 3C.24 Affirmations

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Affirmations During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.27	0.84	-2.72	.007	**
Group	-0.06	0.80	-0.08	.94	
Child Gender	-0.05	0.88	-0.05	.96	
Words	0.008	0.003	2.75	.006	**
Group*Child Gender	0.52	1.23	0.43	.67	

Note. Formula: `aff ~ group_biling * gender_male + words + (1 | participant)`.

**p < .01.

Table 3C.25 Repetitions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Repetitions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	0.13	1.74	0.07	.94	
Group	-0.18	0.69	-0.26	.80	
Child Gender	-0.62	0.51	-1.21	.23	
Words	0.005	0.002	2.47	.01	*
Exposure	-0.004	0.01	-0.32	.75	
Proficiency	0.04	0.12	0.30	.76	
Group*Child Gender	1.02	0.69	1.47	.14	

Note. Formula: `rep ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant)`.

*p < .05.

Table 3C.26 Requests for Repetitions

Results of a Zero-Inflated Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Requests for Repetitions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-15.38	320.84	-0.05	.96
Group	0.36	373.85	0.001	.99
Child Gender	1.65	360.89	0.005	.99
Words	0.009	0.01	0.90	.37
Group*Child Gender	10.88	408.75	0.03	.98

Note. Formula: `reqrep ~ group_biling * gender_male + words + (1 | participant)`.

Table 3C.27 Expansions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Expansions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-5.65	753.50	-0.007	.99
Group	-4.14	1335.89	-0.003	.99
Child Gender	9.98	950.85	0.01	.99
Words	0.26	5.21	0.05	.96
Exposure	-0.26	16.17	-0.02	.99
Proficiency	-9.23	120.26	-0.08	.94
Group*Child Gender	12.17	1173.17	0.01	.99

Note. Formula: `exp ~ group_biling * gender_male + words + exposure + proficiency + (1 | participant).`

Table 3C.28 Extensions

Results of a Negative Binomial Generalized Linear Mixed Model of Changes in Bilingual and Monolingual Children's Use of Extensions During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*
Intercept	-5.45	4.00	-1.37	.17
Group	-11.28	128.30	-0.09	.93
Child Gender	-10.01	170.04	-0.06	.95
Words	0.02	0.02	0.97	.33
Group*Child Gender	-1.35	113500.00	0.00	1.00

Note. Formula: `ext ~ group_biling * gender_male + words + (1 | participant)`.

Table 3C.29 Direct Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Direct Action Requests During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.47	0.81	-3.06	.002	**
Group	0.88	0.81	1.08	.28	
Child Gender	0.26	1.00	0.26	.80	
Words	0.005	0.002	2.17	.03	*
Group*Child Gender	-0.42	1.25	-0.34	.74	

Note. Formula: `actdird ~ group_biling * gender_male + words +`

`(1 | participant)`.

p < .05, **p* < .01.

Table 3C.30 Indirect Action Requests

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Indirect Action Requests During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-2.31	0.94	-2.45	.01	*
Group	-1.02	1.24	-0.82	.41	
Child Gender	0.64	0.92	0.70	.49	
Words	0.004	0.004	1.06	.29	
Group*Child Gender	-0.08	1.73	-0.05	.96	

Note. Formula: `actdiri ~ group_biling * gender_male + words +`

`(1 | participant)`.

*p < .05.

Table 3C.31 Attention Directives

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Attention Directives During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.52	0.51	-2.99	.003	**
Group	0.80	0.52	1.55	.12	
Child Gender	0.95	0.55	1.72	.08	†
Words	0.005	0.001	3.37	.0008	***
Group*Child Gender	-0.98	0.72	-1.37	.17	

Note. Formula: `attdir ~ group_biling * gender_male + words +`

`(1 | participant).`

†*p* < .10, *******p* < .01, ***p < .001.

Table 3C.32 Positive Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Positive Feedback During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-1.82	0.98	-1.86	.06	†
Group	-2.45	1.23	-2.00	.05	†
Child Gender	-0.10	0.80	-0.13	.90	
Words	0.007	0.004	1.61	.11	
Group*Child Gender	-18.62	17690.00	-0.001	.99	

Note. Formula: `pf ~ group_biling * gender_male + words + (1 | participant)`.

†*p* < .10.

Table 3C.33 Negative Feedback

Results of a Poisson Generalized Linear Mixed Model of Changes in Bilingual and Monolingual

Children's Use of Negative Feedback During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	-3.35	0.96	-3.49	.0005	***
Group	-0.22	0.84	-0.26	.79	
Child Gender	0.84	0.81	1.04	.30	
Words	0.01	0.003	3.63	.0003	***
Group*Child Gender	-0.11	1.33	-0.08	.94	

Note. Formula: `nf ~ group_biling * gender_male + words + (1 | participant)`.

***$p < .001$.

Table 3C.34 Number of Words

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Words

Bilingual and Monolingual Children Produced During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	7.75	1.13	6.86	6.73e-12	***
Group	-0.70	0.54	-1.30	.20	
Child Gender	-0.43	0.40	-1.09	.28	
Exposure	-0.02	0.01	-1.56	.12	
Proficiency	-0.23	0.10	-2.32	.02	*
Group*Child Gender	-0.29	0.54	-0.54	.59	

Note. Formula: `words ~ group_biling * gender_male + exposure + proficiency +`

`(1 | participant).`

p < .05, ***p* < .001.

Table 3C.35 Number of Utterances

Results of a Poisson Generalized Linear Mixed Model of Changes in the Number of Utterances

Bilingual and Monolingual Children Produced During Book Sharing (Thai Session)

Predictors	*Estimate*	*SE*	*z*	*p*	
Intercept	6.28	1.00	6.30	3.02e-10	***
Group	-0.49	0.48	-1.02	.31	
Child Gender	-0.22	0.34	-0.65	.52	
Exposure	-0.01	0.009	-1.42	.16	
Proficiency	-0.23	0.09	-2.61	.009	**
Group*Child Gender	-0.47	0.47	-0.99	.32	

Note. Formula: `utterances ~ group_biling * gender_male + exposure + proficiency + (1 | participant)`.

***$p < .001$.

Table 3C.36 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Book Sharing (Thai Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	3.00	0.54	2.09	4.32	Boys	3.47	0.61	2.44	4.95
	Bilingual	2.97	0.49	2.13	4.13	Girls	2.57	0.45	1.79	3.67
Description	Monolingual	1.06	0.46	0.44	2.56	Boys	0.80	0.36	0.32	1.96
	Bilingual	0.88	0.42	0.34	2.33	Girls	1.18	0.56	0.45	3.10
Open-ended question	Monolingual	3.37	0.66	2.27	5.00	Boys	2.31	0.51	1.48	3.61
	Bilingual	1.50	0.33	0.96	2.34	Girls	2.19	0.45	1.44	3.31

Closed-ended question	Monolingual	1.89	0.84	0.77	4.64	Boys	0.46	0.18	0.21	0.99
	Bilingual	0.19	0.11	0.06	0.60	Girls	0.77	0.23	0.42	1.41
Affirmation	Monolingual	0.26	0.14	0.09	0.78	Boys	0.32	0.17	0.11	0.92
	Bilingual	0.31	0.16	0.11	0.87	Girls	0.26	0.17	0.08	0.77
Repetition	Monolingual	1.38	0.74	0.47	4.08	Boys	1.54	0.59	0.71	3.34
	Bilingual	1.92	0.77	0.85	4.33	Girls	1.72	0.66	0.80	3.72
Request for repetition	Monolingual	1.24e-06	0.0002	2.22e-16	4.06e+152	Boys	7.79e-04	0.06	2.22e-16	2.99e+69
	Bilingual	4.09e-04	0.04	2.22e-16	8.15e+80	Girls	6.53e-07	0.0001	2.22e-16	1.06e+158
Expansion	Monolingual	2.22e-16	1.87e-13	2.22e-16	Inf	Boys	2.22e-16	2.30e-13	2.22e-16	Inf
	Bilingual	2.22e-16	3.53e-13	2.22e-16	Inf	Girls	2.22e-16	2.88e-13	2.22e-16	Inf

Extension	Monolingual	1.73e-04	1.47e-02	2.22e-16	1.10e+71	Boys	2.10e-09	0.0002	2.22e-16	Inf
	Bilingual	1.11e-09	6.32e-05	2.22e-16	Inf	Girls	9.18e-05	0.006	2.22e-16	2.12e+52
Direct action request	Monolingual	0.17	0.09	0.06	0.47	Boys	0.24	0.11	0.09	0.60
	Bilingual	0.33	0.12	0.16	0.68	Girls	0.23	0.10	0.09	0.57
Indirect action request	Monolingual	0.21	0.10	0.08	0.56	Boys	0.17	0.10	0.05	0.54
	Bilingual	0.07	0.05	0.02	0.32	Girls	0.09	0.06	0.02	0.37
Attention directive	Monolingual	0.60	0.17	0.34	1.05	Boys	0.87	0.21	0.54	1.41
	Bilingual	0.81	0.18	0.52	1.28	Girls	0.55	0.16	0.31	0.98
Positive feedback	Monolingual	0.32	0.20	0.09	1.00	Boys	7.97e-06	0.07	0.00	Inf
	Bilingual	2.46e-06	0.02	0.00	Inf	Girls	0.10	0.08	0.02	1.00

Negative feedback	Monolingual	0.18	0.10	0.06	0.58	Boys	0.24	0.12	0.08	0.66
	Bilingual	0.14	0.08	0.04	0.46	Girls	0.11	0.07	0.03	0.43
Total utterances	Monolingual	36.50	9.72	21.30	62.50	Boys	20.20	3.42	14.40	28.50
	Bilingual	17.70	4.05	11.20	28.10	Girls	32.00	4.99	23.30	43.80
Total words	Monolingual	113.20	34.10	61.50	208.10	Boys	55.40	10.60	37.70	81.60
	Bilingual	48.30	12.40	28.80	81.20	Girls	98.70	17.70	68.70	141.70

Appendix 4 Chapter 4: Toy Play

Raw Means

Table 4.1 Maternal Raw Means

Mean Frequencies (Standard Deviations) of Mothers' Language Use During Toy Play

Maternal linguistic measure	Bilingual				Monolingual			
	Language		Child gender		Language		Child gender	
	English	Thai	Boys	Girls	English	Thai	Boys	Girls
Label	6.85	6.69	5.71	7.68	3.90	10.86	6.81	7.95
	(5.24)	(7.26)	(5.15)	(7.06)	(2.72)	(7.07)	(6.38)	(6.42)
Description	7.81	18.88	8.63	17.39	16.90	14.00	16.14	14.76
	(5.95)	(29.27)	(6.38)	(28.52)	(17.20)	(12.45)	(16.02)	(14.05)
Open-ended question	24.73	53.85	33.08	44.61	31.76	55.05	44.90	41.90
	(13.86)	(32.41)	(20.27)	(33.83)	(21.42)	(33.40)	(32.11)	(28.69)
Closed-ended question	25.81	47.96	28.92	42.71	60.76	30.86	49.57	48.05
	(14.58)	(27.72)	(20.39)	(26.19)	(32.96)	(21.73)	(36.39)	(23.08)
Reframe	0.46	0.73	0.58	0.61	0.67	1.57	1.24	1.00
	(0.71)	(1.28)	(0.78)	(1.23)	(1.02)	(1.29)	(1.48)	(0.95)
Affirmation	26.19	43.96	25.13	43.61	26.05	14.10	17.14	23.00
	(18.59)	(43.13)	(23.26)	(39.62)	(22.93)	(16.11)	(22.81)	(17.94)
Repetition	16.92	23.69	14.08	25.62	19.52	17.90	16.71	20.71
	(13.70)	(23.05)	(13.46)	(21.66)	(14.94)	(16.30)	(13.48)	(17.33)

Request for repetition	1.69 (1.85)	2.88 (6.04)	2.54 (6.05)	2.07 (2.51)	0.95 (1.47)	2.19 (3.68)	1.43 (1.43)	1.71 (3.80)
Expansion	0.96 (1.25)	2.81 (3.44)	0.92 (1.35)	2.71 (3.31)	0.52 (0.75)	1.71 (2.24)	1.10 (1.30)	1.14 (2.15)
Extension	0.31 (0.68)	0.42 (1.03)	0.33 (0.87)	0.39 (0.88)	0.52 (0.87)	0.19 (0.40)	0.14 (0.48)	0.57 (0.81)
Recast	0.58 (0.90)	1.19 (1.52)	0.63 (0.92)	1.11 (1.50)	1.52 (2.11)	0.19 (0.51)	1.10 (1.55)	0.62 (1.77)
Direct action request	7.69 (5.86)	24.23 (21.81)	15.17 (12.57)	16.64 (21.64)	18.05 (24.21)	20.48 (14.30)	17.76 (13.72)	20.76 (24.51)
Indirect action request	5.88 (5.03)	5.96 (5.60)	5.25 (5.07)	6.50 (5.46)	7.57 (6.05)	9.05 (8.27)	6.57 (4.94)	10.05 (8.69)
Attention directive	1.19 (2.02)	4.92 (4.41)	2.58 (3.01)	3.46 (4.52)	2.14 (2.56)	6.05 (4.17)	3.62 (3.26)	4.57 (4.56)
Positive feedback	0.54 (1.27)	0.46 (0.65)	0.46 (1.28)	0.54 (0.69)	9.90 (16.73)	1.62 (3.22)	4.90 (7.43)	6.62 (16.42)
Negative feedback	3.88 (3.49)	5.15 (5.15)	3.58 (2.72)	5.32 (5.38)	7.10 (9.60)	5.05 (4.46)	6.29 (8.28)	5.86 (6.74)
Total utterances	145.31 (72.36)	174.65 (112.71)	127.21 (63.86)	188.07 (108.53)	257.67 (178.83)	162.29 (76.93)	201.71 (136.10)	218.24 (154.94)

Total words	599.00	1271.19	731.00	1110.04	1252.10	1014.86	1126.05	1140.91
	(314.36)	(875.57)	(413.26)	(897.02)	(710.41)	(513.72)	(653.31)	(609.27)

Table 4.2 Child Raw Means

Mean Frequencies (Standard Deviations) of Child Language Use During Toy Play

Child linguistic measure	Bilingual				Monolingual			
	Language		Child gender		Language		Child gender	
	English	Thai	Boys	Girls	English	Thai	Boys	Girls
Label	8.81	6.31	6.38	8.57	5.29	10.52	8.33	7.48
	(7.75)	(8.25)	(5.86)	(9.50)	(4.31)	(9.03)	(7.79)	(7.30)
Description	8.12	13.27	6.25	14.50	12.05	15.52	10.86	16.71
	(6.53)	(16.15)	(6.53)	(15.00)	(9.99)	(14.59)	(7.25)	(15.76)
Open-ended question	5.69	6.65	4.83	7.32	7.57	11.67	9.14	10.10
	(4.53)	(7.03)	(4.10)	(6.92)	(6.06)	(9.83)	(8.78)	(8.04)
Closed-ended question	4.00	5.69	3.00	6.43	8.48	8.67	8.62	8.52
	(4.64)	(6.66)	(4.30)	(6.40)	(6.76)	(7.50)	(8.20)	(5.90)
Reframe	0.04	0.08	0 (0)	0.11	0.10	0.05	0.05	0.10
	(0.20)	(0.27)		(0.31)	(0.30)	(0.22)	(0.22)	(0.30)
Affirmation	4.46	5.54	2.79	6.89	6.81	2.67	3.52	5.95
	(4.68)	(8.66)	(2.55)	(8.75)	(6.19)	(3.90)	(5.06)	(5.83)
Repetition	3.88	6.54	3.63	6.57	3.38	6.33	4.05	5.67
	(3.37)	(5.74)	(2.84)	(5.78)	(2.46)	(4.86)	(4.34)	(3.75)
Request for repetition	0.42	0.96	0.92	0.50	0.52	0.62	0.62	0.52
	(1.03)	(1.89)	(2.04)	(0.88)	(1.03)	(1.07)	(1.02)	(1.08)

Expansion	0 (0)	0.08 (0.27)	0 (0)	0.07 (0.26)	0.05 (0.22)	0.10 (0.30)	0.05 (0.22)	0.10 (0.30)
Extension	0.12 (0.33)	0.08 (0.27)	0.17 (0.38)	0.04 (0.19)	0.19 (0.68)	0.10 (0.30)	0 (0)	0.29 (0.72)
Recast	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Direct action request	6.23 (6.22)	8.31 (14.35)	4.63 (5.33)	9.54 (13.89)	22.81 (28.95)	10.48 (12.81)	14.71 (18.34)	18.57 (27.17)
Indirect action request	3.73 (5.76)	1.88 (2.45)	1.29 (1.12)	4.11 (5.75)	11.29 (12.61)	3.76 (4.18)	4.38 (4.98)	10.67 (12.67)
Attention directive	1.62 (1.86)	3.88 (3.88)	2.33 (3.23)	3.11 (3.24)	2.38 (2.73)	4.43 (3.88)	3.48 (3.68)	3.33 (3.34)
Positive feedback	0.04 (0.20)	0.08 (0.39)	0 (0)	0.11 (0.42)	0.29 (0.56)	1.48 (2.34)	0.29 (0.56)	1.48 (2.34)
Negative feedback	4.62 (6.05)	6.23 (8.07)	3.13 (4.32)	7.39 (8.41)	12.67 (16.00)	3.14 (3.48)	8.38 (13.53)	7.43 (11.48)
Total utterances	110.27 (58.30)	134.35 (95.49)	91.08 (50.74)	149.07 (89.81)	222.48 (120.87)	153.86 (90.23)	173.67 (107.54)	202.67 (114.96)
Total words	435.31 (286.53)	727.96 (595.74)	415.96 (327.97)	723.64 (555.82)	1052.00 (663.91)	833.33 (655.44)	799.43 (625.69)	1085.90 (678.90)

Within Bilingual Comparisons (English Versus Thai): Maternal Results

Table 4A.1 Estimated Marginal Means

Estimated Marginal Means of Bilingual Mothers' Language Use During Toy Play

Maternal linguistic measure	Language	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	5.79	1.13	3.91	8.57	Boys	4.92	1.14	3.08	7.85
	Thai	5.62	1.19	3.67	8.62	Girls	6.62	1.44	4.27	10.27
Description	English	8.64	1.75	5.75	13.00	Boys	8.64	1.70	5.81	12.90
	Thai	9.64	1.68	6.79	13.70	Girls	9.64	1.64	6.84	13.60
Open-ended question	English	27.10	2.71	22.20	33.20	Boys	32.00	3.85	25.10	40.80
	Thai	38.10	3.56	31.60	46.00	Girls	32.30	3.54	25.90	40.30

Closed-ended question	English	27.60	2.95	22.20	34.20	Boys	27.10	3.34	21.20	34.80
	Thai	34.30	3.25	28.40	41.50	Girls	34.90	3.67	28.20	43.10
Reframe	English	0.31	0.12	0.14	0.67	Boys	0.40	0.17	0.17	0.94
	Thai	0.52	0.21	0.24	1.16	Girls	0.40	0.17	0.17	0.96
Affirmation	English	26.30	4.04	19.30	35.80	Boys	23.70	4.24	16.50	34.00
	Thai	27.50	3.83	20.80	36.40	Girls	30.50	4.77	22.30	41.80
Repetition	English	18.50	3.26	12.97	26.40	Boys	11.80	2.17	8.10	17.10
	Thai	11.30	1.99	7.97	16.10	Girls	17.80	2.94	12.80	24.90
Request for repetition	English	1.80	0.57	0.95	3.41	Boys	1.75	0.63	0.84	3.63
	Thai	1.44	0.44	0.77	2.67	Girls	1.48	0.43	0.82	2.67

Expansion	English	1.03	0.29	0.59	1.82	Boys	0.89	0.25	0.51	1.57
	Thai	1.61	0.36	1.03	2.52	Girls	1.87	0.37	1.26	2.78
Extension	English	0.97	0.47	0.37	2.57	Boys	0.68	0.56	0.13	3.53
	Thai	0.33	0.56	0.01	10.22	Girls	0.47	0.53	0.05	4.67
Recast	English	0.64	0.18	0.37	1.13	Boys	0.64	0.19	0.36	1.15
	Thai	0.73	0.21	0.41	1.28	Girls	0.73	0.20	0.42	1.25
Direct action request	English	8.32	1.19	6.23	11.10	Boys	13.31	2.18	9.56	18.50
	Thai	14.54	1.79	11.34	18.60	Girls	9.09	1.37	6.71	12.30
Indirect action request	English	6.57	0.91	4.97	8.68	Boys	5.14	0.95	3.53	7.47
	Thai	4.06	0.73	2.82	5.84	Girls	5.19	0.90	3.65	7.36

Attention directive	English	1.22	0.46	0.57	2.63	Boys	2.06	0.67	1.07	3.95
	Thai	3.79	0.98	2.26	6.36	Girls	2.26	0.67	1.07	3.95
Positive feedback	English	0.42	0.19	0.17	1.02	Boys	0.28	0.16	0.09	0.89
	Thai	0.20	0.13	0.05	0.75	Girls	0.30	0.17	0.09	0.97
Negative feedback	English	4.02	0.73	2.80	5.79	Boys	3.59	0.81	2.28	5.64
	Thai	3.84	0.71	2.65	5.57	Girls	4.31	0.85	2.90	6.40
Total utterances	English	131.00	14.80	105.00	165.00	Boys	119.00	17.30	88.60	159.00
	Thai	154.00	17.30	123.00	193.00	Girls	170.00	23.00	129.80	224.00
Total words	English	535.00	63.30	422.00	679.00	Boys	646.00	99.60	474.00	881.00
	Thai	1108.00	130.40	874.00	1404.00	Girls	917.00	131.10	688.00	1223.00

Within Bilingual Comparisons (English Versus Thai): Child Results

Table 4A.2 Estimated Marginal Means

Estimated Marginal Means of Bilingual Children's Language Use During Toy Play

Child linguistic measure	Language	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	7.22	1.64	4.57	11.40	Boys	5.03	1.34	2.95	8.60
	Thai	5.33	1.14	3.47	8.20	Girls	7.65	1.73	4.85	12.10
Description	English	8.79	1.34	6.46	12.00	Boys	6.45	1.23	4.39	9.49
	Thai	7.17	1.32	4.94	10.40	Girls	9.77	1.51	7.15	13.35
Open-ended question	English	6.27	1.73	3.60	10.94	Boys	5.23	1.33	3.13	8.74
	Thai	3.95	0.67	2.81	5.55	Girls	4.74	0.83	3.32	6.75

Closed-ended question	English	2.95	0.64	1.90	4.57	Boys	2.36	0.68	1.31	4.23
	Thai	3.11	0.70	1.97	4.89	Girls	3.89	0.94	2.39	6.32
Reframe	English	8.13e-05	0.004	2.22e-16	4.87e+38	Boys	2.12e-07	4.47e-05	0.00	1.34e+178
	Thai	5.67e-05	0.01	2.22e-16	3.50e+175	Girls	0.02	0.04	0.001	1.00
Affirmation	English	3.59	0.82	2.27	5.70	Boys	2.74	0.79	1.53	4.89
	Thai	2.28	0.53	1.43	3.64	Girls	3.00	0.80	1.76	5.12
Repetition	English	4.29	0.79	2.97	6.21	Boys	4.04	0.78	2.74	5.95
	Thai	5.43	0.90	3.89	7.58	Girls	5.77	1.02	4.04	8.23
Request for repetition	English	1.09	0.41	0.51	2.31	Boys	3.31	0.92	1.90	5.79
	Thai	3.49	0.95	2.03	6.03	Girls	1.15	0.41	0.56	2.34

Expansion	English	1.2e-07	0.0003	2.22e-16	Inf	Boys	1.47e-07	0.0003	2.22e-16	Inf
	Thai	7.10e-04	0.05	2.22e-16	1.64e+59	Girls	5.77e-04	0.05	2.22e-16	4.80e+67
Extension	English	0.002	0.05	0.00	2.28e+18	Boys	0.14	0.09	0.04	1.00
	Thai	0.03	0.04	0.003	0.00	Girls	0.001	0.01	0.00	6.04e+17
Direct action request	English	5.93	1.24	3.89	9.04	Boys	4.49	1.18	2.64	7.62
	Thai	2.33	0.54	1.47	3.71	Girls	3.08	0.76	1.88	5.05
Indirect action request	English	3.04	0.60	2.05	4.52	Boys	1.59	0.39	0.98	2.60
	Thai	0.96	0.24	0.58	1.59	Girls	1.84	0.41	1.18	2.87
Attention directive	English	1.59	0.45	0.90	2.82	Boys	2.07	0.56	1.20	3.58
	Thai	3.06	0.63	2.03	4.62	Girls	2.35	0.57	1.45	3.82

Positive feedback	English	5.58e-08	9.61e-05	2.22e-16	Inf	Boys	1.00e-11	1.01e-07	0.00	Inf
	Thai	1.40e-08	2.70e-04	2.22e-16	Inf	Girls	1.49e-04	7.25e-04	8.49e-09	3.00
Negative feedback	English	4.45	1.12	2.69	7.38	Boys	2.94	0.78	1.73	5.01
	Thai	3.38	0.74	2.17	5.26	Girls	5.11	1.11	3.30	7.91
Total utterances	English	97.80	10.90	78.10	123.00	Boys	83.50	12.30	62.00	112.00
	Thai	113.80	12.70	90.90	142.00	Girls	133.40	18.20	101.00	176.00
Total words	English	374.00	55.00	278.00	503.00	Boys	362.00	66.50	250.00	524.00
	Thai	594.00	86.80	443.00	796.00	Girls	613.00	104.70	435.00	864.00

Bilingual Versus Monolingual Comparisons in English: Maternal Results

Table 4B.1 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Maternal Linguistic Measures During Toy Play (English Session)

Maternal linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	3.16	0.83	1.86	5.38	Boys	4.21	0.68	3.04	5.83
	Bilingual	7.18	1.30	4.97	10.37	Girls	5.40	0.80	4.00	7.28
Description	Monolingual	19.78	7.91	8.79	44.50	Boys	8.50	1.18	6.42	11.30
	Bilingual	3.84	1.25	1.98	7.44	Girls	8.93	1.15	6.87	11.60
Open-ended question	Monolingual	16.80	4.38	9.91	28.50	Boys	21.00	2.18	17.00	25.90
	Bilingual	28.20	5.48	19.01	41.80	Girls	22.50	2.23	18.40	27.50

Closed-ended question	Monolingual	38.60	8.87	24.30	61.50	Boys	29.70	2.64	24.80	35.60
	Bilingual	27.20	4.71	19.10	38.60	Girls	35.30	2.95	29.80	41.90
Reframe	Monolingual	0.08	0.07	0.01	0.50	Boys	0.32	0.13	0.14	0.71
	Bilingual	1.42	0.66	0.55	3.65	Girls	0.36	0.15	0.15	0.84
Affirmation	Monolingual	13.90	5.90	5.88	32.90	Boys	20.70	3.40	14.80	28.90
	Bilingual	36.60	11.40	19.43	69.00	Girls	24.60	3.84	17.90	33.80
Repetition	Monolingual	6.84	2.63	3.14	14.90	Boys	10.70	1.66	7.81	14.70
	Bilingual	20.91	5.87	11.84	36.90	Girls	13.40	1.94	9.95	17.90
Request for repetition	Monolingual	0.14	0.21	0.01	2.74	Boys	1.04	0.53	0.38	2.90
	Bilingual	3.01	1.20	1.34	6.74	Girls	0.40	0.40	0.06	2.94

Expansion	Monolingual	0.23	0.25	0.02	2.17	Boys	0.48	0.23	0.18	1.24
	Bilingual	1.08	0.55	0.38	3.05	Girls	0.51	0.27	0.18	1.46
Extension	Monolingual	0.30	0.22	0.07	1.29	Boys	0.19	0.13	0.05	0.76
	Bilingual	0.20	0.11	0.07	0.61	Girls	0.32	0.17	0.11	0.91
Recast	Monolingual	0.29	0.23	0.06	1.41	Boys	0.76	0.22	0.42	1.38
	Bilingual	1.08	0.58	0.37	3.18	Girls	0.41	0.16	0.19	0.88
Direct action request	Monolingual	7.95	2.95	3.75	16.80	Boys	8.78	1.21	6.63	11.61
	Bilingual	8.02	2.29	4.49	14.30	Girls	7.26	1.03	5.46	9.67
Indirect action request	Monolingual	7.40	3.65	2.72	20.12	Boys	4.55	0.88	3.07	6.73
	Bilingual	3.39	1.32	1.54	7.46	Girls	5.51	0.99	3.84	7.93

Attention directive	Monolingual	0.68	0.72	0.08	5.81	Boys	0.70	0.29	0.31	1.61
	Bilingual	0.74	0.62	0.13	4.07	Girls	0.72	0.28	0.33	1.57
Positive feedback	Monolingual	1.92	2.01	0.23	15.95	Boys	1.03	0.40	0.47	2.25
	Bilingual	0.47	0.41	0.08	2.71	Girls	0.88	0.32	0.42	1.86
Negative feedback	Monolingual	2.65	0.54	1.75	4.01	Boys	3.94	0.67	2.80	5.55
	Bilingual	5.29	0.88	3.78	7.40	Girls	3.56	0.60	2.53	5.02
Total utterances	Monolingual	259.00	82.50	135.70	494.00	Boys	151.00	19.60	116.00	197.00
	Bilingual	105.00	25.30	64.20	171.00	Girls	179.00	22.60	139.00	231.00
Total words	Monolingual	1510.00	490.00	782.00	2915.00	Boys	807.00	101.00	626.00	1041.00
	Bilingual	484.00	117.00	296.00	791.00	Girls	904.00	105.00	715.00	1144.00

Bilingual Versus Monolingual Comparisons in English: Child Results

Table 4B.2 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Toy Play (English Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	4.58	1.72	2.14	9.82	Boys	5.80	1.08	3.98	8.44
	Bilingual	9.27	2.73	5.11	16.84	Girls	7.34	1.30	5.13	10.49
Description	Monolingual	4.90	1.58	2.55	9.43	Boys	6.14	1.06	4.34	8.70
	Bilingual	9.16	2.33	5.48	15.31	Girls	7.31	1.17	5.29	10.10
Open-ended question	Monolingual	4.91	1.46	2.69	8.97	Boys	6.27	0.99	4.54	8.64
	Bilingual	7.61	0.96	5.90	9.81	Girls	5.96	0.99	4.26	8.36

Closed-ended question	Monolingual	3.12	0.99	1.64	5.93	Boys	3.95	0.65	2.83	5.51
	Bilingual	4.85	1.25	2.88	8.18	Girls	3.84	0.62	2.77	5.33
Reframe	Monolingual	0.59	1.46	0.004	87.00	Boys	0.002	0.05	0.00	1.45e+15
	Bilingual	0.0002	0.005	0.00	1.84e+14	Girls	0.05	0.05	0.01	0.00
Affirmation	Monolingual	5.29	2.08	2.39	11.72	Boys	3.61	0.73	2.40	5.43
	Bilingual	4.19	1.33	2.20	7.97	Girls	6.14	1.11	4.25	8.87
Repetition	Monolingual	2.63	0.92	1.29	5.36	Boys	2.84	0.55	1.93	4.20
	Bilingual	4.10	1.13	2.35	7.15	Girls	3.79	0.65	2.68	5.37
Request for repetition	Monolingual	0.17	0.17	0.02	1.36	Boys	0.31	0.16	0.11	0.88
	Bilingual	0.66	0.49	0.15	2.93	Girls	0.36	0.16	0.14	0.90

Extension	Monolingual	0.001	0.05	2.22e-16	5.62e+26	Boys	0.001	0.04	2.22e-16	4.67e+26
	Bilingual	0.001	0.04	2.22e-16	1.07e+48	Girls	0.001	0.04	2.22e-16	1.27e+48
Direct action request	Monolingual	10.60	3.46	5.48	20.54	Boys	6.16	1.09	4.31	8.80
	Bilingual	5.10	1.41	2.91	8.91	Girls	8.78	1.37	6.40	12.00
Indirect action request	Monolingual	2.18	0.86	0.99	4.84	Boys	2.10	0.45	1.35	3.24
	Bilingual	4.42	1.36	2.37	8.23	Girls	4.60	0.90	3.09	6.84
Attention directive	Monolingual	1.55	0.77	0.57	4.23	Boys	1.34	0.42	0.71	2.54
	Bilingual	1.60	0.81	0.58	4.44	Girls	1.86	0.5	1.06	3.24
Positive feedback	Monolingual	0.002	0.01	1.99e-08	1.58e+02	Boys	0.001	0.01	0.00	1.71e+12
	Bilingual	0.01	0.13	0.00	1.14e+13	Girls	0.02	0.06	2.94e-05	13.00

Negative feedback	Monolingual	4.85	2.04	2.07	11.36	Boys	4.82	1.02	3.14	7.39
	Bilingual	3.97	1.35	1.99	7.91	Girls	3.99	0.83	2.62	6.09
Total utterances	Monolingual	186.40	43.60	116.10	299.00	Boys	124.00	15.00	97.20	158.00
	Bilingual	95.60	17.90	65.40	140.00	Girls	144.00	16.40	114.00	181.00
Total words	Monolingual	613.00	182.00	336.00	1117.00	Boys	450.00	68.90	330.00	613.00
	Bilingual	427.00	101.00	264.00	690.00	Girls	581.00	84.70	433.00	781.00

Bilingual Versus Monolingual Comparisons in Thai: Maternal Results

Table 4C.1 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Maternal Linguistic Measures During Toy Play (Thai Session)

Maternal linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	10.51	2.04	7.10	15.57	Boys	7.29	1.61	4.67	11.40
	Bilingual	5.96	1.52	3.57	9.97	Girls	8.60	1.92	5.48	13.50
Description	Monolingual	13.10	2.20	9.32	18.40	Boys	12.20	2.16	8.56	17.50
	Bilingual	11.50	1.81	8.32	15.80	Girls	12.20	1.89	8.95	16.70
Open-ended question	Monolingual	51.30	4.99	42.10	62.40	Boys	49.60	4.84	40.70	60.40
	Bilingual	42.40	3.74	35.50	50.70	Girls	43.90	4.01	36.50	52.80

Closed-ended question	Monolingual	34.10	3.23	28.10	41.30	Boys	33.00	3.15	27.20	40.00
	Bilingual	38.30	3.22	32.30	45.40	Girls	39.50	3.42	33.20	47.10
Reframe	Monolingual	1.31	0.33	0.79	2.18	Boys	0.97	0.26	0.56	1.68
	Bilingual	0.60	0.25	0.26	1.39	Girls	0.82	0.34	0.35	1.88
Affirmation	Monolingual	9.13	1.65	6.34	13.20	Boys	11.40	2.03	7.92	16.30
	Bilingual	28.40	4.13	21.17	38.10	Girls	22.80	3.51	16.73	31.10
Repetition	Monolingual	17.60	3.00	12.48	24.90	Boys	11.60	1.72	8.55	15.60
	Bilingual	12.30	1.88	9.02	16.70	Girls	18.70	2.48	14.33	24.50
Request for repetition	Monolingual	1.22	0.41	0.61	2.41	Boys	1.13	0.39	0.56	2.28
	Bilingual	1.10	0.36	0.57	2.12	Girls	1.19	0.38	0.62	2.27

Expansion	Monolingual	1.38	0.35	0.83	2.30	Boys	1.29	0.33	0.77	2.15
	Bilingual	1.51	0.37	0.92	2.49	Girls	1.62	0.41	0.97	2.71
Extension	Monolingual	0.19	0.13	0.04	0.77	Boys	0.16	0.11	0.04	0.66
	Bilingual	0.28	0.15	0.09	0.82	Girls	0.32	0.16	0.12	0.87
Recast	Monolingual	0.21	0.13	0.06	0.70	Boys	0.31	0.13	0.13	0.72
	Bilingual	0.51	0.20	0.23	1.12	Girls	0.34	0.18	0.11	1.01
Direct action request	Monolingual	18.80	2.28	14.70	24.00	Boys	20.60	2.49	16.10	26.30
	Bilingual	16.60	1.84	13.30	20.80	Girls	15.20	1.75	12.00	19.10
Indirect action request	Monolingual	9.80	1.63	6.99	13.73	Boys	5.47	0.83	4.02	7.44
	Bilingual	4.02	0.65	2.91	5.57	Girls	7.21	0.94	5.55	9.38

Attention directive	Monolingual	6.11	1.03	4.35	8.59	Boys	5.00	0.88	3.51	7.12
	Bilingual	4.44	0.70	3.23	6.10	Girls	5.44	0.86	3.95	7.48
Positive feedback	Monolingual	0.76	0.32	0.32	1.80	Boys	0.36	0.18	0.13	0.98
	Bilingual	0.21	0.10	0.08	0.57	Girls	0.44	0.20	0.18	1.08
Negative feedback	Monolingual	5.14	0.95	3.53	7.48	Boys	4.16	0.80	2.82	6.12
	Bilingual	4.27	0.73	3.02	6.04	Girls	5.28	0.91	3.73	7.46
Total utterances	Monolingual	145.00	15.50	117.00	180.00	Boys	121.00	12.70	97.90	149.00
	Bilingual	146.00	14.00	120.00	177.00	Girls	175.00	17.20	143.90	214.00
Total words	Monolingual	886.00	105.00	697.00	1127.00	Boys	815.00	95.10	644.00	1031.00
	Bilingual	1041.00	111.00	838.00	1292.00	Girls	1132.00	124.10	907.00	1412.00

Bilingual Versus Monolingual Comparisons in Thai: Child Results

Table 4C.2 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Toy Play (Thai)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	11.40	2.64	7.13	18.23	Boys	6.54	1.56	4.04	10.60
	Bilingual	5.57	1.12	3.72	8.36	Girls	9.71	1.95	6.47	14.60
Description	Monolingual	13.00	2.18	9.29	18.30	Boys	9.28	1.65	6.48	13.30
	Bilingual	9.40	1.48	6.84	12.90	Girls	13.20	2.23	9.39	18.60
Open-ended question	Monolingual	8.85	1.25	6.65	11.77	Boys	8.27	1.23	6.12	11.17
	Bilingual	5.44	0.76	4.11	7.21	Girls	5.82	0.85	4.34	7.82

Closed-ended question	Monolingual	6.62	1.26	4.52	9.72	Boys	4.71	0.95	3.14	7.07
	Bilingual	3.95	0.74	2.71	5.75	Girls	5.55	1.02	3.83	8.05
Reframe	Monolingual	0.001	0.04	2.22e-16	2.14e+60	Boys	6.50e-07	0.0002	0.00	3.67e+251
	Bilingual	0.0001	0.04	2.22e-16	8.22e+245	Girls	0.11	0.07	0.03	0.00
Affirmation	Monolingual	1.10	0.34	0.58	2.05	Boys	1.36	0.42	0.72	2.54
	Bilingual	2.59	0.63	1.59	4.24	Girls	2.10	0.56	1.22	3.60
Repetition	Monolingual	5.79	0.94	4.17	8.04	Boys	4.86	0.84	3.42	6.88
	Bilingual	5.76	0.87	4.25	7.81	Girls	6.87	1.06	5.04	9.37
Request for repetition	Monolingual	0.19	0.13	0.05	0.74	Boys	0.44	0.26	0.13	1.44
	Bilingual	0.31	0.19	0.09	1.07	Girls	0.13	0.10	0.03	0.59

Extension	Monolingual	0.002	0.66	0.00	2e+269	Boys	0.00002	0.006	0.00	1.89e+267
	Bilingual	9.45e-05	0.0004	8.14e-09	1.00	Girls	0.01	0.02	0.0002	0
Direct action request	Monolingual	5.71	1.93	2.88	11.33	Boys	6.77	2.43	3.28	13.97
	Bilingual	4.07	1.06	2.40	6.89	Girls	3.44	0.93	1.99	5.92
Indirect action request	Monolingual	2.17	0.48	1.39	3.38	Boys	1.63	0.36	1.04	2.54
	Bilingual	1.35	0.29	0.88	2.08	Girls	1.80	0.42	1.13	2.88
Attention directive	Monolingual	3.84	4.75	0.32	46.80	Boys	4.06	10.85	0.02	897.35
	Bilingual	3.53	6.15	0.10	119.50	Girls	3.34	1.18	1.63	6.81
Positive feedback	Monolingual	1.05	0.35	0.53	2.00	Boys	0.01	0.14	0.00	9.28e+10
	Bilingual	0.004	0.06	0.00	4.22e+10	Girls	0.47	0.23	0.18	1.00

Negative feedback	Monolingual	2.86	0.60	1.88	4.35	Boys	2.75	0.59	1.78	4.25
	Bilingual	4.25	0.79	2.92	6.18	Girls	4.41	0.84	3.01	6.47
Total utterances	Monolingual	126.00	16.20	97.20	163.00	Boys	92.70	11.70	71.90	120.00
	Bilingual	108.00	12.60	85.80	137.00	Girls	147.30	17.40	116.10	187.00
Total words	Monolingual	569.00	100.10	399.00	812.00	Boys	398.00	68.60	281.00	563.00
	Bilingual	523.00	82.70	380.00	719.00	Girls	748.00	121.20	539.00	1037.00

Appendix 5 Chapter 5: Child Personal Narrative

Raw Means

Table 5 Child Raw Means

Mean Frequencies (Standard Deviations) of Child Language Use During Personal Narrative

with Interviewer

Child linguistic measure	Bilingual				Monolingual			
	Language		Child gender		Language		Child gender	
	English	Thai	Boys	Girls	English	Thai	Boys	Girls
Label	0.12 (0.43)	0 (0)	0.13 (0.45)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Description	0.85 (1.93)	0.85 (1.22)	1.04 (2.14)	0.68 (0.94)	1.90 (2.62)	1.38 (3.60)	1.76 (2.64)	1.52 (3.60)
Open-ended question	0.58 (0.95)	0.23 (0.51)	0.50 (0.88)	0.32 (0.67)	0.48 (0.87)	0.29 (0.64)	0.43 (0.87)	0.33 (0.66)
Closed-ended question	0.65 (1.09)	0.31 (0.88)	0.46 (0.98)	0.50 (1.04)	0.86 (1.15)	0.57 (0.98)	0.95 (1.20)	0.48 (0.87)
Reframe	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Affirmation	0.23 (0.65)	0.08 (0.27)	0.13 (0.34)	0.18 (0.61)	0.05 (0.22)	0 (0)	0.05 (0.22)	0 (0)
Repetition	0.62 (1.33)	0.35 (0.63)	0.58 (1.35)	0.39 (0.69)	0.14 (0.48)	0.19 (0.40)	0.10 (0.30)	0.24 (0.54)

Request for repetition	0.35 (1.20)	0.12 (0.43)	0.42 (1.28)	0.07 (0.26)	0 (0)	0.14 (0.36)	0.10 (0.30)	0.05 (0.22)
Expansion	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Extension	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Recast	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Direct action request	0 (0)	0.08 (0.39)	0 (0)	0.07 (0.38)	0.10 (0.30)	0.14 (0.65)	0.24 (0.70)	0 (0)
Indirect action request	0 (0)	0 (0)	0 (0)	0 (0)	0.05 (0.22)	0.05 (0.22)	0.05 (0.22)	0.05 (0.22)
Attention directive	0.04 (0.20)	0.12 (0.43)	0.17 (0.48)	0 (0)	0 (0)	0.05 (0.22)	0.05 (0.22)	0 (0)
Positive feedback	0 (0)	0.04 (0.20)	0 (0)	0.04 (0.19)	0 (0)	0 (0)	0 (0)	0 (0)
Negative feedback	0.15 (0.61)	0 (0)	0.17 (0.64)	0 (0)	0.05 (0.22)	0.29 (1.31)	0.29 (1.31)	0.05 (0.22)
Total utterances	20.97 (17.32)	17.54 (7.16)	22.46 (17.13)	16.50 (7.99)	24.05 (11.41)	18.14 (11.01)	21.62 (11.60)	20.57 (11.60)
Total words	86.73 (107.24)	118.96 (135.82)	134.92 (165.13)	75.36 (57.48)	189.00 (135.60)	101.81 (103.59)	158.43 (142.26)	132.38 (111.86)

Within Bilingual Comparisons (English Versus Thai): Child Language with Interviewer

Table 5A.1 Estimated Marginal Means

Estimated Marginal Means of Bilingual Children's Language Use During Personal Narrative with Interviewer

Child linguistic measure	Language	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	0.003	0.03	1.85e-12	4.31e+06	Boys	1.25e-04	0.01	2.22e-16	9.61e+59
	Thai	6.99e-08	4.23e-05	2.22e-16	Inf	Girls	1.58e-06	0.001	2.22e-16	Inf
Description	English	0.49	0.19	0.23	1.06	Boys	0.38	0.17	0.15	0.95
	Thai	0.43	0.18	0.19	1.02	Girls	0.57	0.22	0.26	1.24
Open-ended question	English	0.41	0.17	0.18	0.94	Boys	0.27	0.14	0.10	0.74
	Thai	0.15	0.08	0.05	0.43	Girls	0.23	0.12	0.08	0.66

Closed-ended question	English	0.61	0.22	0.30	1.25	Boys	0.16	0.12	0.04	0.69
	Thai	0.13	0.10	0.03	0.56	Girls	0.49	0.18	0.24	1.03
Affirmation	English	0.30	0.23	0.06	1.43	Boys	0.00004	0.0002	0.00	0.82
	Thai	0.00006	0.0003	1.00e-08	0.44	Girls	0.46	0.30	0.12	1.69
Repetition	English	1.25	0.51	0.55	2.84	Boys	0.81	0.39	0.31	2.14
	Thai	0.46	0.24	0.16	1.31	Girls	0.71	0.31	0.29	1.71
Request for repetition	English	0.004	0.01	0.00001	2.00	Boys	0.003	0.01	8.23e-06	1
	Thai	1.14e-07	0.001	0.00	Inf	Girls	1.38e-07	0.001	0.00	Inf
Direct action request	English	2.42e-09	5.71e-06	2.22e-16	Inf	Boys	3.71e-09	8.76	2.22e-16	Inf
	Thai	7.17e-06	6.96e-04	2.22e-16	5.62e+79	Girls	4.68e-06	1.91e-04	2.22e-16	2.61e+30

Attention directive	English	1.99e-05	0.03	2.22e-16	Inf	Boys	0.09	0.09	0.01	1.00
	Thai	4.99e-06	0.04	2.22e-16	Inf	Girls	0.00	9.76e-06	0.00	Inf
Positive feedback	English	1.34e-07	0.0001	2.22e-16	Inf	Boys	3.87e-08	3.52e-05	2.22e-16	Inf
	Thai	6.90e-05	0.01	2.22e-16	3.55e+79	Girls	0.0002	0.01	2.22e-16	1.63e+30
Negative feedback	English	0.01	0.10	5.51e-16	8.69e+10	Boys	7.46e-06	0.0004	2.22e-16	6.97e+40
	Thai	0.00	1.80e-06	2.22e-16	Inf	Girls	3.27e-07	0.002	2.22e-16	Inf
Total utterances	English	18.60	1.95	15.10	23.00	Boys	20.00	2.80	15.00	26.50
	Thai	16.00	1.70	12.90	19.80	Girls	14.90	1.97	11.40	19.40
Total words	English	61.90	11.30	42.90	89.30	Boys	92.60	23.20	55.90	153.40
	Thai	81.60	14.80	56.60	117.70	Girls	54.50	12.70	34.10	87.30

Within Bilingual Comparisons (English Versus Thai): Child Language with Interviewer and with Mothers

Table 5A.2 Estimated Marginal Means

Estimated Marginal Means of Bilingual Children's Language Use During Prompted Reminiscing with Their Mother and During

Personal Narrative with Interviewer

Child linguistic measure	Language	Mean	Standard error	95% confidence interval		Interlocutor	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	0.79	0.30	0.37	2.00	Mother	3.48	1.26	1.70	7.00
	Thai	4.07e-05	0.15	0.00	Inf	Interviewer	9e-06	0.03	0.0	Inf
Description	English	3.54	0.74	2.33	5.37	Mother	13.50	1.99	10.07	18.10
	Thai	4.25	0.82	2.90	6.24	Interviewer	1.12	0.30	0.66	1.89
Open-ended question	English	1.54	0.35	0.98	2.42	Mother	3.34	0.80	2.08	5.36
	Thai	0.86	0.24	0.49	1.49	Interviewer	0.40	0.14	0.20	0.78

Closed-ended question	English	1.65	0.36	1.07	2.54	Mother	3.39	0.68	2.27	5.06
	Thai	0.85	0.24	0.48	1.50	Interviewer	0.41	0.14	0.21	0.80
Reframe	English	4.07e-05	0.01	2.22e-16	1.79e+109	Mother	0.01	0.02	9.38e-05	1.00
	Thai	6.84e-06	0.01	2.22e-16	Inf	Interviewer	2.90e-08	2.27e-05	0.00	Inf
Affirmation	English	1.03	0.30	0.58	1.83	Mother	2.19	0.57	1.31	3.67
	Thai	0.40	0.17	0.17	0.92	Interviewer	0.19	0.09	0.07	0.51
Repetition	English	2.62	0.56	1.72	3.99	Mother	9.06	1.38	6.70	12.24
	Thai	2.12	0.50	1.33	3.38	Interviewer	0.61	0.19	0.34	1.12
Request for repetition	English	0.42	0.17	0.19	0.94	Mother	0.76	0.32	0.34	1.74
	Thai	0.21	0.10	0.08	0.55	Interviewer	0.11	0.06	0.04	0.35

Expansion	English	6.25e-05	0.02	2.22e-16	1.84e+264	Mother	0.08	0.05	0.02	0.00
	Thai	1.49e-05	0.04	2.22e-16	Inf	Interviewer	1.00e-08	3.29e-05	0.00	Inf
Extension	English	0.001	0.12	2.22e-16	1.69e+77	Mother	0.56	0.62	0.06	5.00
	Thai	0.001	0.17	2.22e-16	1.12e+242	Interviewer	1.40e-06	0.0004	0.00	1.47e+252
Direct action request	English	2.32e-05	0.11	0.00	Inf	Mother	0.63	0.30	0.25	2.00
	Thai	0.17	0.09	0.06	0.00	Interviewer	6.20e-06	0.03	0.00	Inf
Indirect action request	English	4.09e-04	0.09	2.22e-16	1.54e+181	Mother	0.15	0.09	0.05	0.00
	Thai	5.95e-05	0.04	2.22e-16	Inf	Interviewer	1.60e-07	0.0001	0.00	Inf
Attention directive	English	0.21	0.12	0.07	0.63	Mother	0.56	0.22	0.26	1.23
	Thai	0.28	0.11	0.13	0.60	Interviewer	0.10	0.07	0.03	0.38

Positive feedback	English	3.20e-05	0.001	2.22e-16	1.44e+11	Mother	4.13e-06	6.38e-05	2.22e-16	8.61e+07
	Thai	1.71e-05	0.0003	2.22e-16	1.27e+08	Interviewer	1.33e-04	2.40e-03	2.22e-16	4.45e+11
Negative feedback	English	0.79	0.24	0.43	1.00	Mother	1.93	0.44	1.22	3.00
	Thai	3.55e-05	0.14	0.00	Inf	Interviewer	1.46e-05	0.06	0.00	Inf
Total utterances	English	61.40	4.91	52.40	72.00	Mother	186.90	14.44	160.40	217.90
	Thai	56.00	4.49	47.80	65.70	Interviewer	18.40	1.53	15.60	21.70
Total words	English	211.00	26.80	164.00	271.00	Mother	708.30	89.50	551.00	910.00
	Thai	264.00	33.60	206.00	340.00	Interviewer	78.80	10.20	61.00	102.00

Bilingual Versus Monolingual Comparisons in English: Child Language with Interviewer

Table 5B.1 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Personal Narrative with Interviewer

(English Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Description	Monolingual	0.64	0.23	0.31	1.32	Boys	0.74	0.27	0.35	1.55
	Bilingual	0.49	0.19	0.23	1.06	Girls	0.43	0.16	0.20	0.92
Open-ended question	Monolingual	0.22	0.12	0.07	0.68	Boys	0.43	0.19	0.17	1.06
	Bilingual	0.49	0.20	0.22	1.11	Girls	0.25	0.13	0.09	0.71
Closed-ended question	Monolingual	0.39	0.29	0.09	1.75	Boys	0.57	0.23	0.25	1.28
	Bilingual	0.43	0.26	0.13	1.43	Girls	0.30	0.14	0.11	0.79

Affirmation	Monolingual	4.10e-06	6.60e-05	0.00	5.93e+08	Boys	0.002	0.004	4.23e-06	1.00
	Bilingual	0.68	0.36	0.24	2.00	Girls	0.002	0.03	0.00	1.07e+11
Repetition	Monolingual	3.31e-06	0.03	0.00	Inf	Boys	5.80e-06	0.05	0.00	Inf
	Bilingual	0.28	0.17	0.08	1.00	Girls	0.16	0.10	0.04	1.00
Request for repetition	Monolingual	6.88e-07	0.0001	0.00	2.85e+128	Boys	6.44e-05	0.01	2.22e-16	5.48e+125
	Bilingual	1.77e-02	0.05	6.35e-05	5.00	Girls	1.89e-04	0.01	2.22e-16	3.71e+31
Direct action request	Monolingual	0.002	0.06	2.22e-16	6.83e+42	Boys	2.49e-04	0.06	2.22e-16	1.57e+198
	Bilingual	2.81e-08	8.81e-05	2.22e-16	Inf	Girls	1.34e-07	0.0004	2.22e-16	Inf
Indirect action request	Monolingual	2.84e-04	0.03	2.22e-16	8.89e+77	Boys	4.36e-09	0.0001	2.22e-16	Inf
	Bilingual	2.92e-09	6.69e-05	2.22e-16	Inf	Girls	1.90e-04	0.02	2.22e-16	1.56e+77

Attention directive	Monolingual	1.45e-06	0.0002	2.22e-16	1.04e+85	Boys	1.66e-04	8.75e-03	2.22e-16	3.47e+42
	Bilingual	6.40e-05	0.004	2.22e-16	9.37e+48	Girls	5.62e-07	6.05e-05	2.22e-16	1.88e+88
Negative feedback	Monolingual	0.0006	0.01	4.28e-14	7.78e+06	Boys	0.001	0.01	8.18e-14	1.47e+07
	Bilingual	0.01	0.26	2.22e-16	1.21e+15	Girls	0.01	0.14	2.22e-16	6.53e+14
Total utterances	Monolingual	15.30	3.93	9.08	25.70	Boys	21.70	2.83	16.70	28.30
	Bilingual	22.00	4.49	14.54	33.20	Girls	15.50	1.97	11.90	20.00
Total words	Monolingual	77.20	29.60	35.60	168.00	Boys	101.20	19.80	68.10	150.50
	Bilingual	83.20	25.40	44.90	154.00	Girls	63.50	11.90	43.40	92.80

Bilingual Versus Monolingual Comparisons in English: Child Language with Interviewer and with Mothers

Table 5B.2 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Prompted Reminiscing with Their

Mother and During Personal Narrative with Interviewer (English Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Interlocutor	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	0.01	0.26	0.00	1.62e+41	Mother	4.59	1.74	2.17	10.00
	Bilingual	0.88	0.34	0.41	2.00	Interviewer	0.001	0.05	0.00	3.11e+40
Description	Monolingual	4.99	1.02	3.32	7.51	Mother	10.48	1.59	7.74	14.18
	Bilingual	3.95	0.93	2.48	6.30	Interviewer	1.88	0.57	1.04	3.43
Open-ended question	Monolingual	0.82	0.31	0.39	1.72	Mother	2.70	0.53	1.82	3.99
	Bilingual	2.76	0.76	1.60	4.78	Interviewer	0.84	0.22	0.50	1.42

Closed-ended question	Monolingual	1.32	0.41	0.71	2.45	Mother	3.80	0.60	2.78	5.19
	Bilingual	2.30	0.57	1.40	3.77	Interviewer	0.80	0.17	0.52	1.22
Reframe	Monolingual	0.001	0.05	2.22e-16	1.38e+69	Mother	0.02	0.03	0.0005	1.00
	Bilingual	0.0001	0.03	2.22e-16	8.11e+262	Interviewer	3.64e-06	0.001	0.00	1.15e+271
Affirmation	Monolingual	0.36	0.19	0.13	1.02	Mother	2.33	0.43	1.61	3.37
	Bilingual	1.23	0.40	0.64	2.35	Interviewer	0.19	0.13	0.05	0.72
Repetition	Monolingual	0.95	0.40	0.40	2.21	Mother	6.12	1.08	4.31	8.70
	Bilingual	2.36	0.63	1.38	4.02	Interviewer	0.36	0.14	0.17	0.76
Request for repetition	Monolingual	1.41e-05	0.08	0.00	Inf	Mother	1.01	0.42	0.45	2.00
	Bilingual	0.59	0.23	0.27	1.00	Interviewer	8.20e-06	0.05	0.00	Inf

Expansion	Monolingual	1.12e-04	0.04	2.22e-16	1.30e+297	Mother	0.06	0.05	0.01	0.00
	Bilingual	9.94e-06	0.01	2.22e-16	Inf	Interviewer	2.00e-08	2.51e-05	0.00	Inf
Extension	Monolingual	2.30e-04	0.04	2.22e-16	2.81e+132	Mother	5.44e-02	0.04	0.01	0.00
	Bilingual	1.32e-05	0.03	2.22e-16	Inf	Interviewer	6.00e-08	0.0001	0.00	Inf
Recast	Monolingual	1.94e-06	5.28e-04	2.22e-16	2.15e+229	Mother	7.35e-08	7.42e-04	2.22e-16	Inf
	Bilingual	2.85e-10	2.88e-06	2.22e-16	Inf	Interviewer	7.53e-09	2.04e-06	2.22e-16	Inf
Direct action request	Monolingual	0.12	0.09	0.03	1.00	Mother	0.60	0.23	0.28	1.00
	Bilingual	3.12e-05	0.16	0.00	Inf	Interviewer	6.30e-06	0.03	0.00	Inf
Indirect action request	Monolingual	0.11	0.07	0.03	0.00	Mother	0.13	0.08	0.04	0.00
	Bilingual	6.58e-06	0.04	0.00	Inf	Interviewer	5.43e-06	0.03	0.00	Inf

Attention directive	Monolingual	3.07e-06	0.02	0.00	Inf	Mother	0.09	0.07	0.02	0.00
	Bilingual	0.07	0.05	0.02	0.00	Interviewer	2.46e-06	0.01	0.00	Inf
Positive feedback	Monolingual	0.001	0.04	2.22e-16	6.17e+28	Mother	0.01	0.02	0.0004	0.00
	Bilingual	0.0002	0.04	2.22e-16	9.88e+165	Interviewer	1.55e-05	0.003	0.00	7.00e+167
Negative feedback	Monolingual	0.49	0.32	0.13	1.82	Mother	2.99	0.79	1.77	5.05
	Bilingual	0.83	0.34	0.37	1.88	Interviewer	0.14	0.11	0.03	0.64
Total utterances	Monolingual	68.60	12.30	48.10	98.00	Mother	207.60	15.88	178.30	241.70
	Bilingual	64.20	9.20	48.30	85.40	Interviewer	21.20	1.82	17.90	25.20
Total words	Monolingual	269.00	66.00	166.00	438.00	Mother	706.00	73.30	574.30	868.00
	Bilingual	274.00	53.30	186.00	403.00	Interviewer	105.00	12.00	83.20	131.00

Bilingual Versus Monolingual Comparisons in Thai: Child Language with Interviewer

Table 5C.1 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Personal Narrative with Interviewer

(Thai Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Gender	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Description	Monolingual	0.39	0.20	0.13	1.12	Boys	0.20	0.11	0.07	0.63
	Bilingual	0.31	0.15	0.12	0.81	Girls	0.59	0.26	0.24	1.44
Open-ended question	Monolingual	0.13	0.10	0.02	0.67	Boys	0.09	0.07	0.02	0.47
	Bilingual	0.13	0.09	0.03	0.55	Girls	0.18	0.13	0.04	0.78
Closed-ended question	Monolingual	0.33	0.16	0.12	0.90	Boys	0.20	0.13	0.06	0.73
	Bilingual	0.23	0.15	0.06	0.83	Girls	0.38	0.18	0.14	1.00

Affirmation	Monolingual	7.16e-07	0.0003	0.00	Inf	Boys	2.27e-05	0.01	2.22e-16	Inf
	Bilingual	1.60e-02	0.04	0.0002	2.00	Girls	5.05e-04	0.03	2.22e-16	1.87e+42
Repetition	Monolingual	0.18	0.09	0.07	0.51	Boys	0.18	0.09	0.07	0.51
	Bilingual	0.27	0.11	0.12	0.62	Girls	0.27	0.11	0.12	0.62
Request for repetition	Monolingual	0.12	0.07	0.03	0.00	Boys	0.13	0.08	0.04	0.00
	Bilingual	0.001	0.04	0.00	7.68e+52	Girls	0.001	0.04	0.00	7.07e+52
Direct action request	Monolingual	1.32e-04	7.89e-04	7.29e-10	24.00	Boys	7.31e-06	0.0001	2.00e-16	4.22e+07
	Bilingual	6.23e-06	9.01e-05	2.00e-16	3.08e+07	Girls	1.12e-04	0.001	7.31e-10	17.00
Indirect action request	Monolingual	0.003	0.05	2.22e-16	2.45e+11	Boys	0.001	0.04	2.22e-16	1.28e+37
	Bilingual	5.25e-05	0.003	2.22e-16	1.48e+38	Girls	0.0002	0.005	2.22e-16	3.03e+14

Attention directive	Monolingual	0.0003	0.02	2.22e-16	1.21e+47	Boys	0.04	0.08	0.001	2.00
	Bilingual	0.0001	0.02	2.22e-16	2.64e+178	Girls	6.70e-07	0.0001	0.00	1.34e+183
Positive feedback	Monolingual	8.20e-08	0.0002	2.22e-16	Inf	Boys	2.74e-08	5.07e-05	2.22e-16	Inf
	Bilingual	7.30e-05	0.01	2.22e-16	4.11e+78	Girls	2.18e-04	0.01	2.22e-16	5.07e+36
Negative feedback	Monolingual	1.04e-05	4.93e-04	2.22e-16	5.37e+36	Boys	4.70e-06	0.0005	2.22e-16	3.04e+85
	Bilingual	5.74e-09	5.01e-06	2.22e-16	Inf	Girls	1.27e-08	0.00001	2.22e-16	Inf
Total utterances	Monolingual	18.60	1.81	15.20	22.60	Boys	17.30	1.63	14.30	20.90
	Bilingual	16.60	1.41	14.00	19.70	Girls	17.90	1.57	15.00	21.40
Total words	Monolingual	69.60	14.80	45.40	107.00	Boys	77.10	16.00	50.70	117.00
	Bilingual	79.40	14.70	54.70	115.00	Girls	71.80	13.60	48.90	105.00

Bilingual Versus Monolingual Comparisons in Thai: Child Language with Interviewer and with Mothers

Table 5C.2 Estimated Marginal Means

Estimated Marginal Means of Bilingual and Monolingual Child Linguistic Measures During Prompted Reminiscing with Their

Mother and During Personal Narrative with Interviewer (Thai Session)

Child linguistic measure	Group	Mean	Standard error	95% confidence interval		Interlocutor	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	Monolingual	0.0001	0.01	2.22e-16	7.29e+39	Mother	0.51	0.35	0.13	2.00
	Bilingual	0.004	0.34	2.22e-16	2.00e+81	Interviewer	7.00e-07	7.80e-05	0.00	6.39e+87
Description	Monolingual	3.22	0.70	2.09	4.98	Mother	10.96	1.20	8.82	13.61
	Bilingual	4.65	0.78	3.33	6.51	Interviewer	1.37	0.37	0.81	2.33
Open-ended question	Monolingual	1.34	0.35	0.80	2.26	Mother	4.58	0.83	3.20	6.57
	Bilingual	0.99	0.28	0.56	1.73	Interviewer	0.29	0.11	0.14	0.60

Closed-ended question	Monolingual	1.36	0.37	0.80	2.33	Mother	2.64	0.61	1.67	4.17
	Bilingual	1.00	0.29	0.57	1.78	Interviewer	0.52	0.20	0.24	1.10
Reframe	Monolingual	1.80e-08	0.0001	2.22e-16	Inf	Mother	4.27e-04	3.03e-02	2.22e-16	6.59e+57
	Bilingual	9.45e-06	0.01	2.22e-16	Inf	Interviewer	4.00e-10	2.39e-06	2.22e-16	Inf
Affirmation	Monolingual	0.04	0.18	6.16e-06	267.10	Mother	1.36	0.67	0.51	3.64
	Bilingual	0.45	0.27	0.14	1.50	Interviewer	0.01	0.06	2.10e-06	87.78
Repetition	Monolingual	0.94	0.27	0.53	1.67	Mother	6.00	0.82	4.57	7.88
	Bilingual	1.65	0.34	1.10	2.50	Interviewer	0.26	0.08	0.14	0.49
Request for repetition	Monolingual	0.13	0.07	0.04	0.37	Mother	0.33	0.15	0.14	0.80
	Bilingual	0.18	0.09	0.07	0.47	Interviewer	0.07	0.04	0.02	0.20

Expansion	Monolingual	3.60e-04	0.04	2.22e-16	6.30e+102	Mother	0.17	0.08	0.07	0.00
	Bilingual	3.82e-05	0.04	2.22e-16	Inf	Interviewer	8.00e-08	0.0001	0.00	Inf
Extension	Monolingual	3.47e-08	0.001	2.22e-16	Inf	Mother	0.001	0.003	8.45e-06	0.00
	Bilingual	6.36e-09	0.0001	2.22e-16	Inf	Interviewer	0.00	5.20e-09	0.00	Inf
Recast	Monolingual	7.47e-09	1.31e-05	2.22e-16	Inf	Mother	9.45e-06	4.52e-04	2.22e-16	2.06e+36
	Bilingual	2.03e-06	2.20e-04	2.22e-16	1.06e+88	Interviewer	1.60e-09	2.80e-06	2.22e-16	Inf
Direct action request	Monolingual	0.18	0.08	0.08	0.45	Mother	0.36	0.15	0.16	0.81
	Bilingual	0.18	0.08	0.07	0.43	Interviewer	0.09	0.05	0.03	0.26
Indirect action request	Monolingual	0.09	0.06	0.02	0.00	Mother	0.10	0.07	0.02	0.00
	Bilingual	1.76e-06	0.01	0.00	Inf	Interviewer	1.57e-06	0.01	0.00	Inf

Attention directive	Monolingual	0.06	0.05	0.02	0.27	Mother	0.16	0.10	0.05	0.56
	Bilingual	0.14	0.08	0.05	0.41	Interviewer	0.06	0.04	0.01	0.22
Positive feedback	Monolingual	0.02	0.15	9.06e-08	5960.00	Mother	0.002	0.04	0.00	2.02e+13
	Bilingual	0.001	0.03	0.00	1.35+e13	Interviewer	0.02	0.10	5.75e-08	4100.00
Negative feedback	Monolingual	0.50	0.21	0.22	1.00	Mother	1.64	0.33	1.10	2.00
	Bilingual	4.33e-05	0.19	0.00	Inf	Interviewer	1.32e-05	0.06	0.0	Inf
Total utterances	Monolingual	57.30	5.27	47.80	68.80	Mother	186.50	14.11	160.40	216.70
	Bilingual	56.90	4.45	48.70	66.40	Interviewer	17.50	1.44	14.80	20.60
Total words	Monolingual	267.00	41.50	196.00	364.00	Mother	826.90	101.30	648.20	1055.00
	Bilingual	282.00	38.50	215.00	370.00	Interviewer	91.20	12.20	69.80	119.00

APPENDIX 6 Chapter 6: Influence of Communicative Settings

Within Bilingual Comparisons (English Versus Thai): Maternal Results

Table 6A.1 Estimated Marginal Means

Estimated Marginal Means of Bilingual Mothers' Language Use During Prompted Reminiscing, Book Sharing, and Toy Play

Maternal linguistic measure	Language	Mean	Standard error	95% confidence interval		Task	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	6.23	1.02	4.50	8.61	Prompted reminiscing	2.61	0.55	1.73	3.95
	Thai	3.49	0.59	2.51	4.86	Book sharing	6.12	1.13	4.24	8.82
						Toy play	6.34	1.14	4.45	9.04
Description	English	8.94	1.28	6.75	11.85	Prompted reminiscing	8.68	1.41	6.30	11.95
	Thai	7.35	0.92	5.74	9.42	Book sharing	5.66	0.88	4.17	7.69
						Toy play	10.85	1.38	8.44	13.95

Open-ended question	English	33.30	2.13	29.30	37.80	Prompted reminiscing	62.80	4.62	54.30	72.60
	Thai	46.50	2.89	41.10	52.60	Book sharing	27.10	2.03	23.40	31.40
						Toy play	35.80	2.49	31.20	41.10
Closed-ended question	English	32.20	2.10	28.30	36.60	Prompted reminiscing	62.30	4.75	53.60	72.40
	Thai	38.50	2.46	33.90	43.60	Book sharing	19.70	1.58	16.90	23.10
						Toy play	35.40	2.54	30.70	40.80
Reframe	English	0.33	0.08	0.20	0.55	Prompted reminiscing	0.22	0.08	0.11	0.47
	Thai	0.34	0.10	0.19	0.60	Book sharing	0.37	0.10	0.22	0.64
						Toy play	0.46	0.12	0.28	0.77

Affirmation	English	24.30	2.99	19.00	31.00	Prompted reminiscing	37.34	4.91	28.80	48.40
	Thai	17.80	2.22	13.90	22.80	Book sharing	8.09	1.11	6.16	10.60
						Toy play	29.74	3.77	23.15	38.20
Repetition	English	18.60	2.00	15.03	23.00	Prompted reminiscing	27.17	3.15	21.61	34.17
	Thai	12.10	1.31	9.75	15.00	Book sharing	7.23	0.90	5.66	9.25
						Toy play	17.13	1.91	13.74	21.35
Request for repetition	English	1.47	0.31	0.98	2.22	Prompted reminiscing	2.28	0.47	1.52	3.43
	Thai	0.99	0.21	0.65	1.49	Book sharing	0.48	0.13	0.28	0.83
						Toy play	1.59	0.33	1.05	2.41

Expansion	English	1.00	0.19	0.69	1.46	Prompted reminiscing	2.34	0.37	1.71	3.20
	Thai	2.27	0.32	1.72	3.00	Book sharing	0.92	0.22	0.58	1.47
						Toy play	1.59	0.28	1.12	2.25
Extension	English	0.33	0.13	0.15	0.70	Prompted reminiscing	0.20	0.09	0.08	0.49
	Thai	0.20	0.08	0.09	0.43	Book sharing	0.29	0.13	0.12	0.69
						Toy play	0.30	0.11	0.14	0.63
Recast	English	0.46	0.13	0.27	0.80	Prompted reminiscing	1.53	0.25	1.11	2.11
	Thai	0.95	0.15	0.69	1.30	Book sharing	0.24	0.09	0.11	0.53
						Toy play	0.79	0.15	0.54	1.15

		M	SD	LL	UL		M	SD	LL	UL
Direct action request	English	6.91	0.78	5.54	8.62	Prompted reminiscing	7.04	0.87	5.51	8.98
	Thai	9.98	1.05	8.11	12.27	Book sharing	6.41	0.82	4.98	8.25
						Toy play	12.68	1.43	10.15	15.85
Indirect action request	English	4.57	0.61	3.52	5.94	Prompted reminiscing	2.95	0.44	2.20	3.97
	Thai	2.34	0.30	1.82	3.02	Book sharing	2.06	0.38	1.44	2.95
						Toy play	5.75	0.76	4.42	7.47
Attention directive	English	1.28	0.23	0.90	1.82	Prompted reminiscing	0.31	0.08	0.18	0.53
	Thai	2.23	0.35	1.64	3.03	Book sharing	6.28	0.94	4.66	8.45
						Toy play	2.47	0.41	1.78	3.44

Positive feedback	English	0.67	0.16	0.42	1.07	Prompted reminiscing	0.78	0.20	0.46	1.31
	Thai	0.27	0.09	0.14	0.51	Book sharing	0.20	0.09	0.08	0.48
						Toy play	0.49	0.13	0.30	0.82
Negative feedback	English	5.14	0.58	4.11	6.43	Prompted reminiscing	5.37	0.69	4.17	6.91
	Thai	2.95	0.34	2.35	3.71	Book sharing	2.59	0.38	1.94	3.45
						Toy play	4.25	0.53	3.32	5.44
Total utterances	English	150.00	10.35	131.00	172.00	Prompted reminiscing	267.00	20.82	228.90	311.50
	Thai	139.00	9.62	121.00	159.00	Book sharing	73.40	5.81	62.80	85.90
						Toy play	152.80	12.02	130.80	178.60

Total words	English	611.00	55.40	510.00	731.00	Prompted reminiscing	1535.00	121.00	1313.00	1793.00
	Thai	1435.00	130.70	1199.00	1718.00	Book sharing	646.00	50.90	553.00	755.00
						Toy play	827.00	65.50	707.00	967.00

Within Bilingual Comparisons (English Versus Thai): Child Results

Table 6A.2 Estimated Marginal Means

Estimated Marginal Means of Bilingual Children's Language Use During Prompted Reminiscing, Book Sharing,

Toy Play, and Child Personal Narrative

Child linguistic measure	Language	Mean	Standard error	95% confidence interval		Task	Mean	Standard error	95% confidence interval	
				Lower	Upper				Lower	Upper
Label	English	1.99	0.41	1.33	3.00	Prompted reminiscing	2.66	0.58	1.73	4.00
	Thai	0.01	16.40	0.00	Inf	Book sharing	3.23	0.64	2.19	5.00
						Toy play	7.06	1.30	4.91	10.00
						Personal narrative	0.00001	0.03	0.00	Inf
Description	English	3.87	0.54	2.94	5.09	Prompted reminiscing	12.49	1.28	10.21	15.29
	Thai	3.84	0.52	2.94	5.02	Book sharing	1.96	0.42	1.28	3.00

						Toy play	6.63	0.83	5.17	8.49
						Personal narrative	1.36	0.34	0.84	2.22
Open-ended question	English	2.40	0.40	1.72	3.34	Prompted reminiscing	2.61	0.50	1.79	3.81
	Thai	1.38	0.26	0.95	2.00	Book sharing	2.89	0.57	1.996	4.26
						Toy play	3.36	0.62	2.34	4.82
						Personal narrative	0.43	0.13	0.24	0.78
Closed-ended question	English	1.89	0.32	1.35	2.63	Prompted reminiscing	3.04	0.51	2.18	4.24
	Thai	1.12	0.23	0.75	1.66	Book sharing	1.04	0.26	0.64	1.70
						Toy play	2.75	0.49	1.94	3.91
						Personal narrative	0.51	0.17	0.27	0.96

Reframe	English	0.002	0.18	2.22e-16	1.29e+89	Prompted reminiscing	0.04	0.05	0.005	0
	Thai	6.79e-06	0.04	2.22e-16	Inf	Book sharing	2.81e-05	0.02	0.00	Inf
						Toy play	0.05	0.05	0.01	0
						Personal narrative	0.00	2.77e-05	0.00	Inf
Affirmation	English	1.61	0.34	1.07	2.43	Prompted reminiscing	1.99	0.45	1.27	3.12
	Thai	0.67	0.18	0.40	1.12	Book sharing	1.72	0.42	1.07	2.78
						Toy play	2.21	0.47	1.45	3.37
						Personal narrative	0.16	0.07	0.06	0.39
Repetition	English	2.88	0.41	2.18	3.81	Prompted reminiscing	8.65	1.12	6.70	11.17
	Thai	2.86	0.42	2.14	3.81	Book sharing	2.65	0.46	1.88	3.73

Request for repetition	English	0.15	0.07	0.06	0.35
	Thai	0.15	0.06	0.07	0.34
Expansion	English	0.0001	0.01	2.22e-16	2.41e+111
	Thai	0.002	0.75	2.22e-16	5.81e+307

Toy play	4.18	0.62	3.12	5.60
Personal narrative	0.71	0.20	0.41	1.23
Prompted reminiscing	0.73	0.28	0.34	1.54
Book sharing	0.03	0.02	0.01	0.13
Toy play	0.25	0.10	0.11	0.56
Personal narrative	0.09	0.05	0.03	0.26
Prompted reminiscing	0.05	0.03	0.01	0.00
Book sharing	0.08	0.05	0.03	0.00
Toy play	1.98e-04	0.02	0.00	6.96e+69
Personal narrative	6.00e-08	4.32e-05	0.00	Inf

Extension	English	2.27e-04	1.09	2.22e-16	Inf	Prompted reminiscing	0.04	0.03	0.01	0.00
	Thai	8.24e-07	0.01	2.22e-16	Inf	Book sharing	1.01e-06	0.01	0.00	Inf
						Toy play	0.04	0.03	0.01	0.00
						Personal narrative	0.00	5.38e-07	0.00	Inf
Recast	English	2.63e-08	4.29e-06	2.22e-16	1.98e+132	Prompted reminiscing	3.43e-07	3.66e-05	2.22e-16	8.85e+84
	Thai	1.42e-10	4.98e-07	2.22e-16	Inf	Book sharing	1.51e-08	5.32e-05	2.22e-16	Inf
						Toy play	1.14e-11	6.15e-08	2.22e-16	Inf
						Personal narrative	2.35e-10	6.67e-07	2.22e-16	Inf
Direct action request	English	0.01	16.38	0.00	Inf	Prompted reminiscing	0.52	0.13	0.32	1.00
	Thai	0.43	0.11	0.26	1.00	Book sharing	0.93	0.24	0.56	2.00

Indirect action request	English	0.002	5.41	2.22e-16	Inf
	Thai	0.001	3.06	2.22e-16	Inf
Attention directive	English	0.44	0.13	0.24	0.79
	Thai	0.64	0.14	0.42	0.97

Toy play	2.94	0.58	2.00	4.00
Personal narrative	1.18e-05	0.04	0.00	Inf
Prompted reminiscing	0.10	0.04	0.05	0.00
Book sharing	0.08	0.05	0.02	0.00
Toy play	1.17	0.25	0.78	2.00
Personal narrative	0.00	3.91e-06	0.00	Inf
Prompted reminiscing	0.55	0.14	0.33	0.91
Book sharing	1.01	0.24	0.64	1.60
Toy play	1.75	0.35	1.18	2.60
Personal narrative	0.08	0.05	0.02	0.26

Positive feedback	English	1.95e-07	4.52e-05	2.22e-16	1.51e+192	Prompted reminiscing	2.00e-10	1.85e-07	2.22-16	Inf
	Thai	8.38e-08	3.85e-05	2.22e-16	Inf	Book sharing	3.21e-05	2.44e-04	1.04e-11	99.00
						Toy play	1.54e-06	1.43e-05	1.79e-14	132.00
						Personal narrative	2.68e-08	1.24e-05	2.22e-16	Inf
Negative feedback	English	1.13	0.21	0.79	2.00	Prompted reminiscing	1.48	0.30	0.99	2.00
	Thai	0.01	9.14	0.00	Inf	Book sharing	0.66	0.18	0.38	1.00
						Toy play	3.16	0.56	2.23	4.00
						Personal narrative	1.95e-05	0.05	0.00	Inf
Total utterances	English	63.10	4.85	54.20	73.50	Prompted reminiscing	191.10	17.50	159.60	229.00
	Thai	58.80	4.53	50.50	68.40	Book sharing	33.60	3.18	27.80	40.40

					Toy play	114.90	10.59	95.80	137.80
					Personal narrative	18.70	1.81	15.40	22.60
Total words	English	212.00	22.20	172.00	260.00	Prompted reminiscing	704.90	87.20	552.40	900.00
	Thai	264.00	27.70	215.00	325.00	Book sharing	98.90	12.40	77.20	127.00
						Toy play	515.40	64.20	403.20	659.00
						Personal narrative	87.10	11.10	67.80	112.00

APPENDIX 7 Transcript Excerpts

Prompted Reminiscing

English

Example of maternal use of descriptions

Mother:	**Big** boat or **small** boat?
Mother:	Do you want to go on a **big** boat or a **small** boat?
Child:	Big.
Mother:	**Big** boat.
Mother:	And sit properly please. Sit like a princess *laughs*.
Mother:	What color is the boat?
Mother:	**Brown**?

Example of maternal use of repetitions

Mother:	Cat.
Child:	Cat.
Mother:	What's a cat?
Child:	Meow.
Mother:	**Meow.**
Mother:	Do you want a cat?
Child:	*nods*
Mother:	What color do you want?
Child:	White.
Mother:	**White.**
Child:	No black.
Mother:	Small cat or a big cat?
Child:	Small.
Mother:	**Small**.

Example of maternal use of negative feedback

Mother:	**No. Put it back, put it away.**
Child:	*reaches for next prompt card*
Mother:	*laughs* **No not yet.** Do you have something else to tell me about butterfly?
Child:	Dragonfly too.
Mother:	**No, now we (are) talking about butterfly, not dragonfly** *smiles*.

Example of child use of affirmations

Mother:	At home we cook in the kitchen.
Child:	**Yeah.**
Mother:	Have you ever go(ne) inside a kitchen?
Child:	Yes.
Mother:	Have you ever helped baking something?
Child:	Yes.
Mother:	What? Tell me about it.
Child:	Baking a cake, bunny cake, a bunny bunny cake *smiles*.

Child: I make the grass and then I make the grass.
Mother: How do you make the grass?
Child: I put some green things.
Mother: Colors.
Child: **Yes**, some green colors inside the bowl and then mix.

Thai
Example of maternal use of direct action requests
Mother: **Quick, answer.** What does the doctor do?
Child: I don't know.
Mother: Did the doctor give you medicine?
Child: Yes.
Mother: **Speak louder**, I can't hear you.
Child: Yes.
Mother: Yes, the doctor gave you medicine, right?
Child: Yes *stands on chair*.
Mother: **Sit down.**

Example of maternal use of expansions
Mother: When they become butterflies, what do they eat?
Child: Nectar.
Mother: Nectar. From where?
Child: Flower.
Mother: **Ah, they eat nectar from flower**.

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Book Sharing

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English
Example of maternal use of labels
Mother: Where is it?
Child: Jump over!
Mother: *gasps* Jump to… in the…?
Mother: **Oh it's a trumpet!**
Child: Trumpet.
Mother: **Is that trumpet?**
Mother: **It's… it's saxophone?**
Mother: **Is this trumpet or saxophone?**
Mother: **I think it's saxophone.**

Example of maternal use of repetitions
Mother: Ooh look at the bees.
Child: A lot of bees.
Mother: **A lot of bees.**
Mother: The bees are going to the hive and the boy's calling into the hole.
Mother: What popped up?
Mother: A hamster?

Mother: A rat?
Mother: Oh no, the boy fell off the tree. And what's this? An…?
Child: Owl
Mother: **Owl.**

Example of maternal use of negative feedback
Mother: The frog get(s) into the what?
Child: Uh concertino.
Mother: **Not concertino. What?**
Child: Trumpet.
Mother: Trumpet, correct.
Mother: But suddenly the frog just get(s) into his face, jump to his face.
Mother: And he just fell to?
Child: Ground.
Mother: **What is it? The drum, the drum.**
Mother: **Jump and broke the drum.**

Example of child use of negative feedback
Child: Um his name's... mmm his name's…
Mother: Joe!
Child: *shakes head* You pick.
Mother: Uh Andy.
Child: **No.**
Mother: Timmy.
Child: **No.**
Mother: Tom.
Child: Yes.
Mother: And what is his name? The dog.
Child: **The dog can be um it's a girl.**
Child: You name him.
Mother: Mm Lily.
Child: **No.**
Mother: Jenny.
Child: **No.**
Mother: Uh Rachel.
Child: **No. I'll pick it.**
Mother: Okay.
Child: Um Candy *smiles*.

Thai
Example of maternal use of expansions
Mother: And what happened?
Child: Frog goes in.
Mother: *nods* **Frog is hiding inside.**

Example of maternal use of direct action requests
Mother: Tell mommy the story.
Child: Frog goes in.
Mother: *nods* **Frog is hiding inside.**

Toy Play

English
Example of maternal use of indirect action requests
Mother: What (are) we gonna play? **Can you tell mommy?** What (are) we gonna play?
Child: How about they lost their one chicken?
Mother: What?
Child: They lost all their animals? How about this game? Is it okay then?
Mother: Okay then.
Child: *vocalizes*
Mother: **Please can you help me? Can you turn off the fan for me please?** Thank you.

Example of maternal use expansion
Child: *points duck* That's geese.
Mother: *moves cow and horse*
Child: Eat some water food in him.
Mother: **Drink some water**.

Example of child use of affirmations
Child: Why you say poor farmer?
Mother: (Be)cause they lost all animals.
Child: **Yes.**
Mother: Okay, watch out! Let's get started.
Child: **Okay.**

Thai
Example of maternal use of direct action requests
Mother: What do we have here? **Tell me what we have**.
Child: *speaks English* This (is) the water for the farmer
Mother: **Speak Thai.** Where? What?

Example of maternal use of repetitions
Mother: What are all of these animals? Tell me.
Child: Duck.
Mother: Mm duck. And what else?
Child: What is this one called? *touches sheep*
Mother: Sheep.
Child: **Sheep.**
Mother: What is this one called?
Child: Pig.
Mother: Pig. And this one?

Child: I don't know.
Mother: What is it?
Child: I don't know.
Mother: Cow.
Child: **Cow.**
Mother: Horse. Horse or dog?
Child: **Horse**.
Mother: Are they the same?
Child: No. Dog is like… it's like…
Mother: Dog.
Child: **Dog**.

Child Personal Narrative

English
Example of child use of affirmations
Interviewer: What else do you remember about the time when you got hurt?
Child: Hospital.
Interviewer: Hospital.
Child: **Yeah**.

Example of child use of closed-ended questions
Interviewer: Is there anything else you remember?
Child: And then…
Child: Umm…
Interviewer: Is that it?
Child: **Are you talking about hospital?**
Child: **Are you talking about hospital?**
Interviewer: Mhmm yeah when you went to see the doctor and you got a shot.

Thai
Example of child use of descriptions
Child: When I cried, I went to my mom.
Interviewer: Mmhmm.
Child: And my mom helped me.
Interviewer: And what else do you remember?
Child: I remember that I crashed into something **sharp** and blood came out and it hurt.

Example of child use of repetitions
Interviewer: Anything you wanted to say about the evening time? What do you do with your
                 family?
Child: **Family**…
Interviewer: Do you remember anything else?
Child: No.

APPENDIX 8 Picture of Toy Stimuli