Effects of examiner behaviour on children's spoken language production in conversation

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For this study, 21 speech pathologists elicited conversational samples from 126 primary-school age children in Queensland, Australia (ages 5 to 8), using a standard interview elicitation protocol. Regression analyses showed significant effects for examiner behaviour on children's spoken language performance.

Introduction and rationale

Spontaneous language sample analysis (LSA) is an ecologically valid method to describe children's spoken language skills. In an attempt to improve the clinical use of LSA, researchers have created databases of samples elicited from children with typical performance to use as a comparison for their clients with language impairment. In order to 'standardize' language sampling procedures, clinicians are reminded to use the same language sampling elicitation procedures as those that were used to create the databases (e.g., Miller, Heilmann, Nockerts, Andriacchi, & Iglesias, 2006; Westerveld & Heilmann, 2012). The current study investigated the effects of examiner variables on children's spoken language production in conversation when a standard protocol was used. It was hypothesised that by using a standard protocol and specific instructions on the use of elicitation techniques, the examiner effects would be minimal.

The Conversation Task (Evans & Craig, 1992; Westerveld & Gillon, 2002)

(5 minutes, use stopwatch)
Interview with the child. Respond to the child with rewording of child's comments or "that's interesting, tell me some more about that." Try to avoid leading questions. Allow the child to take the lead. Start with the first question and introduce the remaining questions when appropriate.

- *"What did you bring to show me?"*
Object discussed _____ *"Can you tell me about it?"*
- *"Tell me about the sorts of things you do in the classroom".*
- *"What do you like to do when you're not in school?"*
- *"Do you have any brothers or sisters?"*

Participants

126 children (63 boys, 63 girls; ages 5;5 to 8;4) participated. These children attended primary schools (years 1 to 3) across Queensland, Australia, in urban, regional, and remote locations (representing a range of socio-economic areas). The children spoke English as their first language, and were progressing normally at school.
Twenty-one practising speech pathologists assisted with the data collection; each speech pathologist assessed between three to eleven children.

Conversation samples were transcribed and analysed, using Systematic Analysis of Language Transcripts – New Zealand version (SALT-NZ: Miller, Gillon, & Westerveld, 2012)
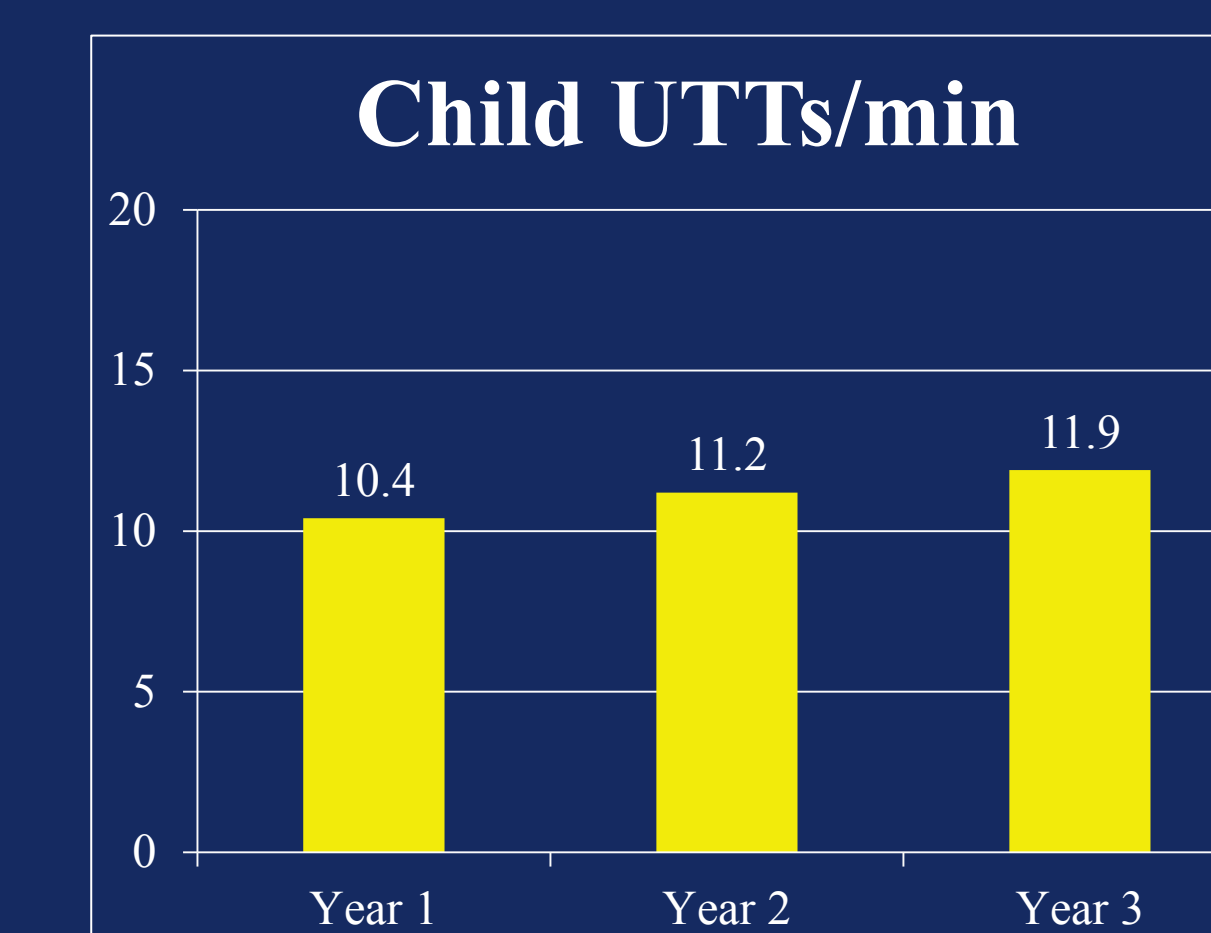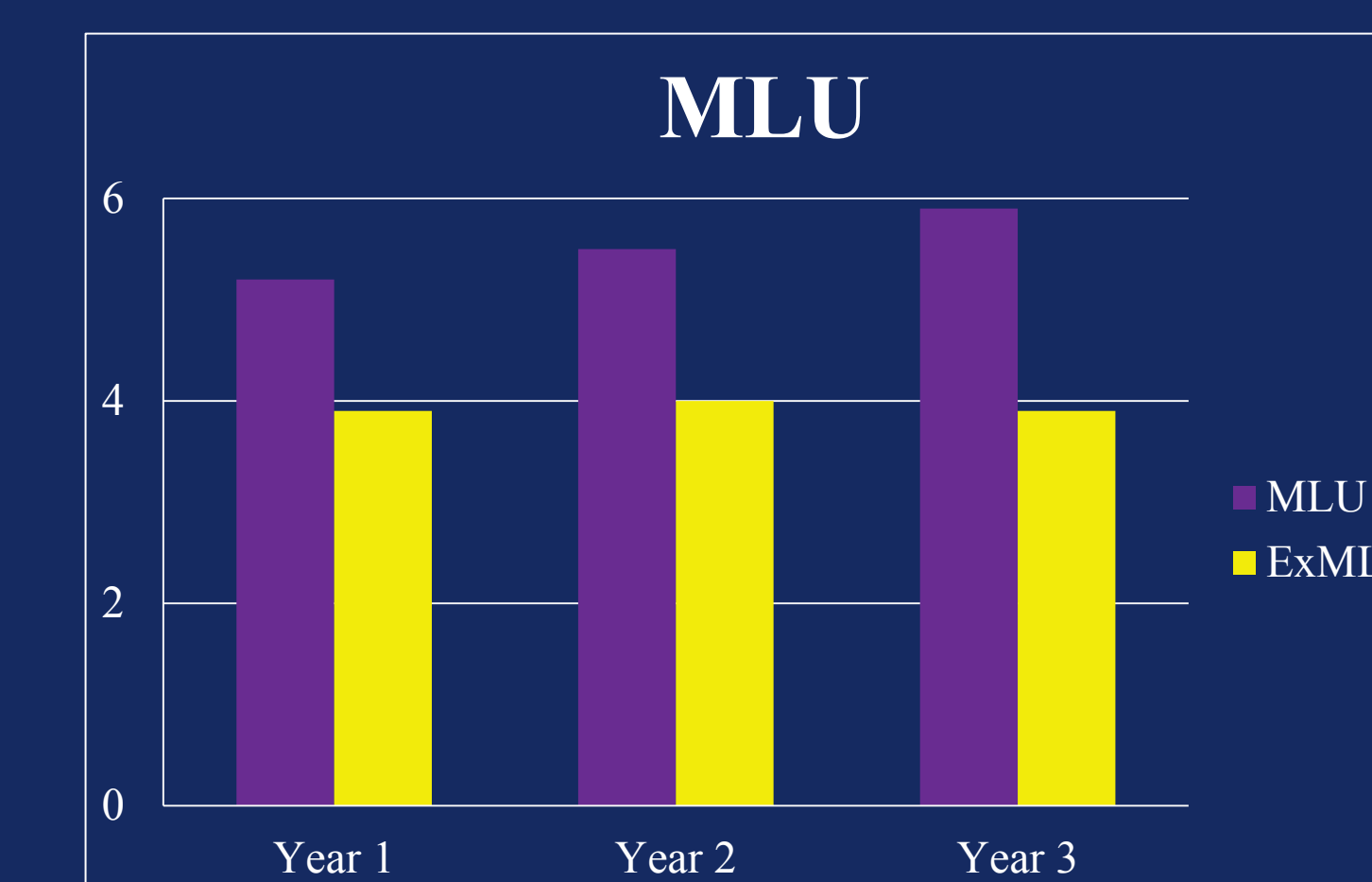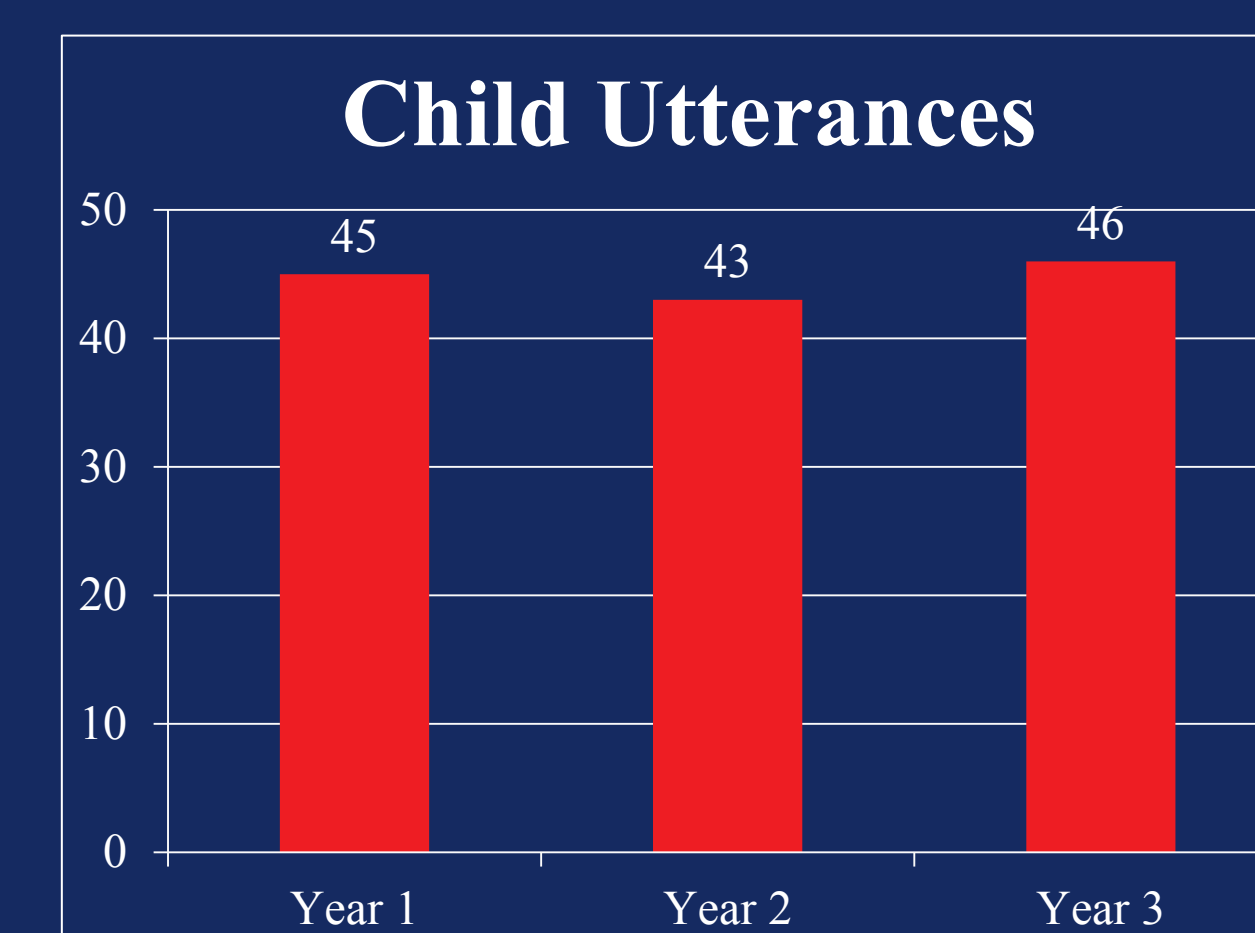
Results

* p < .05, # p <.05

Child Utterances
Year 1: 45, Year 2: 43, Year 3: 46

MLU (MLU / ExMLU)

Child UTTs/min
Year 1: 10.4, Year 2: 11.2, Year 3: 11.9

Table 1: Examiner behaviour as predictors of participant language output

Group	n	Language measure	Full Model		Examiner MLU		Ex Quest/min		Ex UTTs/min	
			F	R²	b	t	b	t	b	t
Year 1	44	MLU	5.937	.308*	.225	1.089	-.162	-1.409	-.090	-1.514
		UTTs/min	3.338	.447*	.308	.660	-.758	-2.921#	.246	1.838
Year 2	41	MLU	6.917	.359*	.159	.892	-.584	-3.294#	-.011	-.162
		UTTs/min	2.236	.392	-.278	-.657	-.739	-1.751	.264	1.680
Year 3	41	MLU	14.132	.534*	-.556	-2.571#	-.064	-.355	-.201	-3.113#
		UTTs/min	1.442	.324	-.325	-.565	-.164	-.342	.212	1.233

MLU = Mean length of utterance, Ex = Examiner, UTT = utterance, Quest = question

Main findings & Conclusion

1. 32.5% of children produced less than 50 utterances. Of those children, 78% were engaged in the task for < 5mins. Conversations of < 5mins duration were 1.84 times more likely to elicit less than 50 utterances.

2. Overall, there were significant effects of examiner behaviour on children's MLU for all year groups. In general, a higher number of examiner utterances and questions per minute was associated with lower child MLU. Causation of this link is not clear.

Results emphasise the importance of engaging children in at least 5 minutes of conversation to elicit 50 utterances. Future research should more closely investigate the causal relationship between examiner variables and children's spoken language performance.

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