The development of referent introduction in fictional stories
Phyllis Schneider, Communication Sciences and Disorders, University of Alberta
Poster presented at Symposium for Research in Child Language Disorders, Madison, WI, June 2014.

Introduction
Children's ability to introduce referents in stories may vary according to whether the referent is animate as well as whether an animate referent is a main or secondary character. The Edmonton Narrative Norms Instrument (ENNI; Schneider, Dubé, & Hayward, 2005) developed a measure of referent introduction, First Mentions, that allows the assessment of a child's ability to introduce referents in fictional stories (Schneider & Hayward, 2010). The current study looks at children's ability to introduce referents with finer-grained analyses of referent introduction. Stories told by children aged 4-9 from the Edmonton Narrative Norms Instrument were analysed for effects of age, language status (typical development or language impairment), referent animacy, and character prominence on referent introduction scores.

Methods
Stimuli: ENNI story picture sets
    Designed to conform to story grammar (Stein & Glenn, 1979)
Each set contains 3 stories that increase in length and complexity.
Each story set contains:
* Two main characters, different animals and genders, introduced in the first picture of the first story in the set.
* A secondary character introduced in the second story.
* Another secondary character introduced in the third story.
* The secondary characters are the same type of animal as one of the two main characters.

Thus the stories increase in referential difficulty; main characters can be distinguished in a number of simple ways (e.g., gender, animal), while the later characters are more difficult to differentiate referentially.
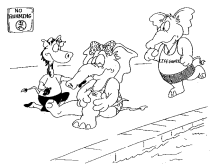
Participants
* ENNI normative sample, ages 4-9
* 300 children with typical development, 50 per age group
* 77 children with language impairment, 10-17 per age

ENNI pictures that introduce referents
Set A

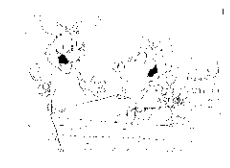Giraffe, elephant, ball   Second elephant (lifeguard)   Airplane   Third elephant, net
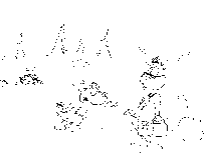
Set B
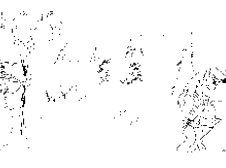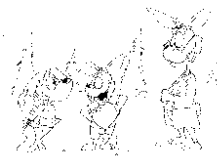

Rabbit, dog, sandcastle   Second rabbit (doctor)   Balloon   Third rabbit (balloon man)   new balloons

FM scoring:

0 = referent not mentioned

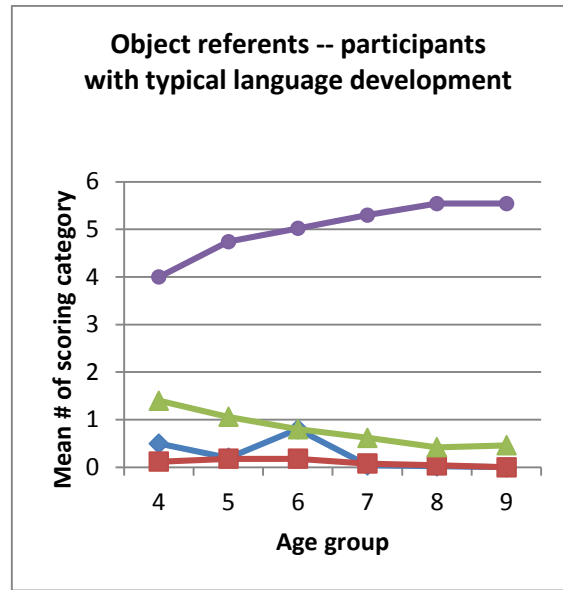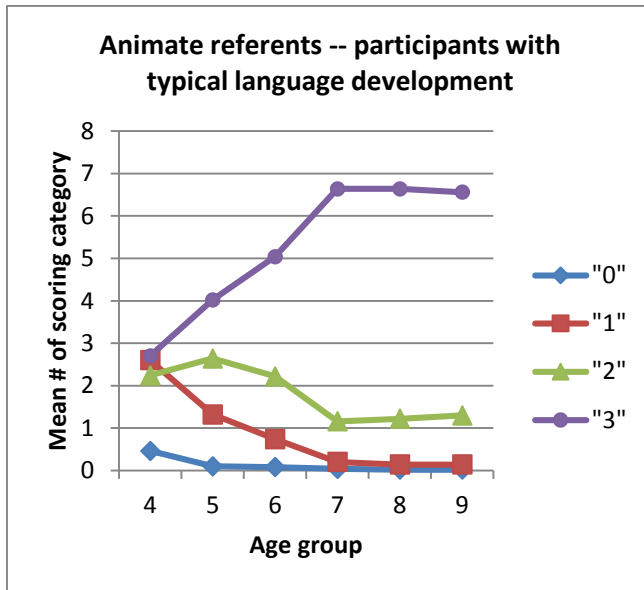1 = fully inadequate mention, e.g., pronoun

2 = inadequate but informative mention, e.g., definite article + noun

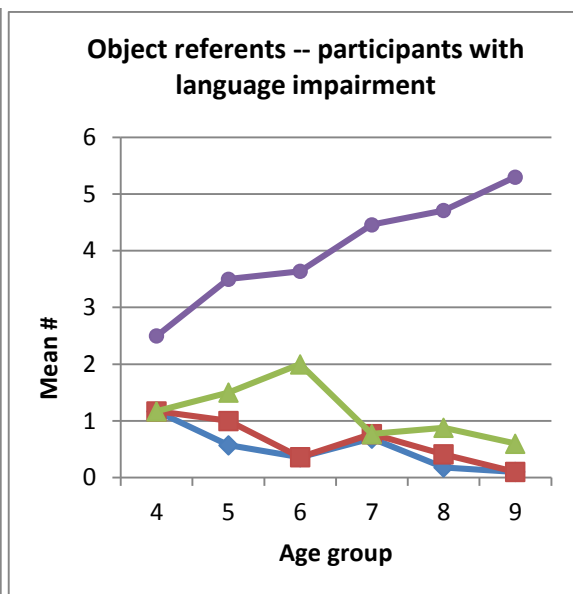3 = fully adequate mention, e.g., indefinite article + noun

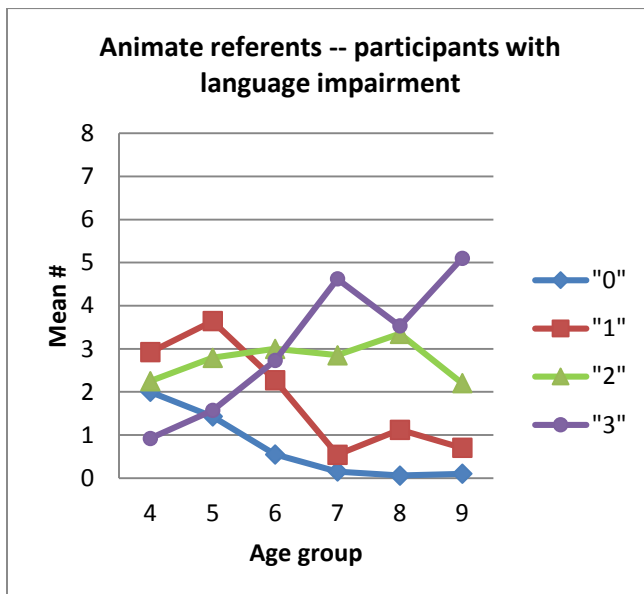See website for full description of scoring: http://www.rehabresearch.ualberta.ca/enni

Results for Animacy

Mean numbers of each FM category for TD children by age group

*Mean number of each FM category for children with LI by age group*

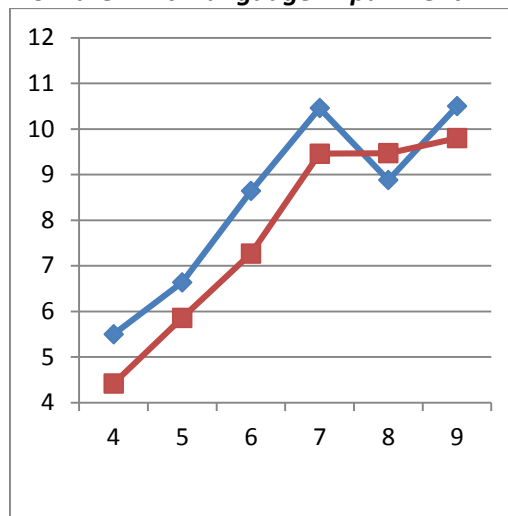**ANOVA comparison of FM scores for animate vs. object referents**

Variable	F	p	pEta^2
Animacy	144.95	<.0001	.28
Age	54.48	<.0001	.43
Language status (TD-LI)	120.91	<.0001	.25
Animacy x Age	18.09	<.001	.20
Animacy x Lang. status	24.27	<.001	.07
Age x Lang. status	3.09	.009	.04

Results: FM scores for main vs. secondary characters

Children with typical development
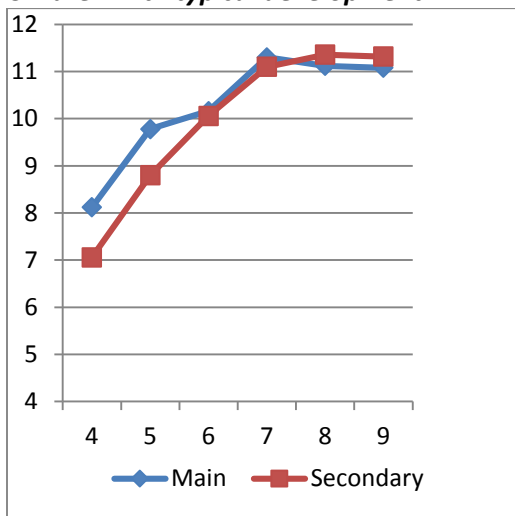
Children with language impairment

Variable	F	p	pEta^2
Character (main vs. secondary)	14.17	.0002	.04
Age	43.5	<0001	.37
Language status (TD-LI)	86.21	<.0001	.19
Character x Age	2.93	<.001	.20
Character x Language Status	2.27	n.s. (.13)	.01
Age x Language Status	2.04	n.s. (.07)	.03

Summary of Results
- Main effects were found for age, language status, animacy, and character prominence, with interactions between variables.
- Young children were more successful introducing inanimate than animate referents and main characters than secondary ones.
- Children with language impairments continued to have difficulty with animate and secondary referents until later ages than did children with typical development.

ENNI website: http://www.rehabresearch.ualberta.ca/enni