

Narrative Abilities in Teens with Autism Spectrum Disorder across Two Contexts



Juandiego Carmona, Cynthia Boo, & Letitia Naigles
Department of Psychological Sciences, University of Connecticut, Storrs, CT

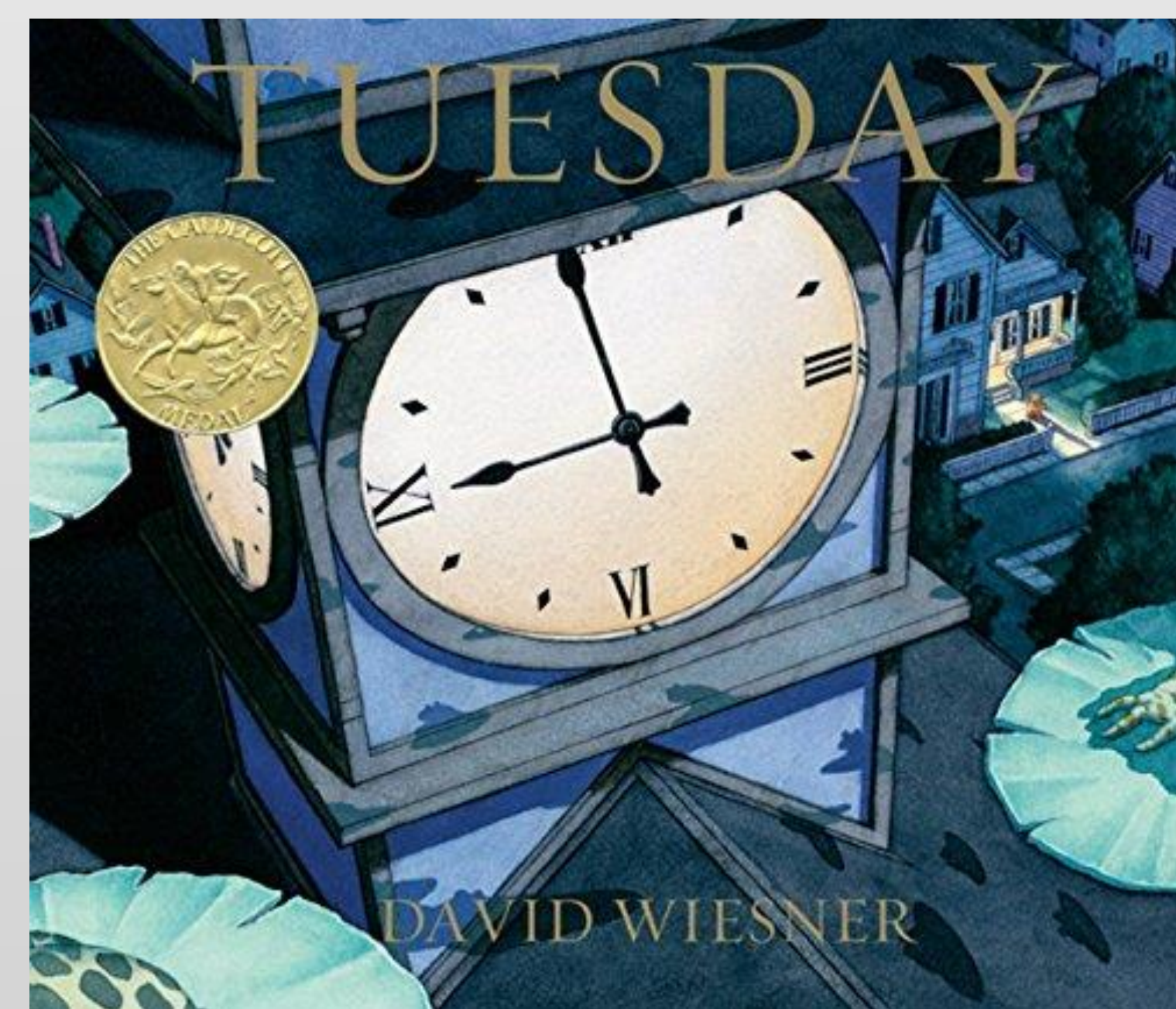


Introduction

- Narrative microstructure impairments are commonly reported among individuals with Autism Spectrum Disorder¹
- Narrating from storybooks**, children with ASD are reported to use fewer utterances, fewer words, and fewer unique verbs than language matched TD children^{3,9}
- Narrating personal experiences**, Losh and Capps (2003) found that school-aged TD children and children with ASD produced more utterances than narrating a storybook
- The current study compares TD adolescents and adolescents with ASD in both of these contexts to see how each may highlight different strengths and weaknesses in structural language abilities
- These analyses focus on pronouns (1st and 3rd) and verb types (GAP vs content) both of which have shown to vary by group in different contexts^{2,7,10}
 - General all-purpose (GAP) verbs: *come, do, get, go, have, make*
 - Content verbs: *fly, eat, build*

Methods

- Storybook narratives** were elicited using the *Tuesday* wordless picture book as part the ADOS-2⁴
- Personal narratives** were elicited with the investigator prompting the teen to narrate specific events (e.g. "Can you tell me about a time you got jabbed by something?")⁸
- In total, 4 personal narratives collected
- Coding: Participant videos were transcribed and CLAN algorithms were used to extract MLU, utterance count, and noun, verb, and pronoun types and tokens⁶



Results

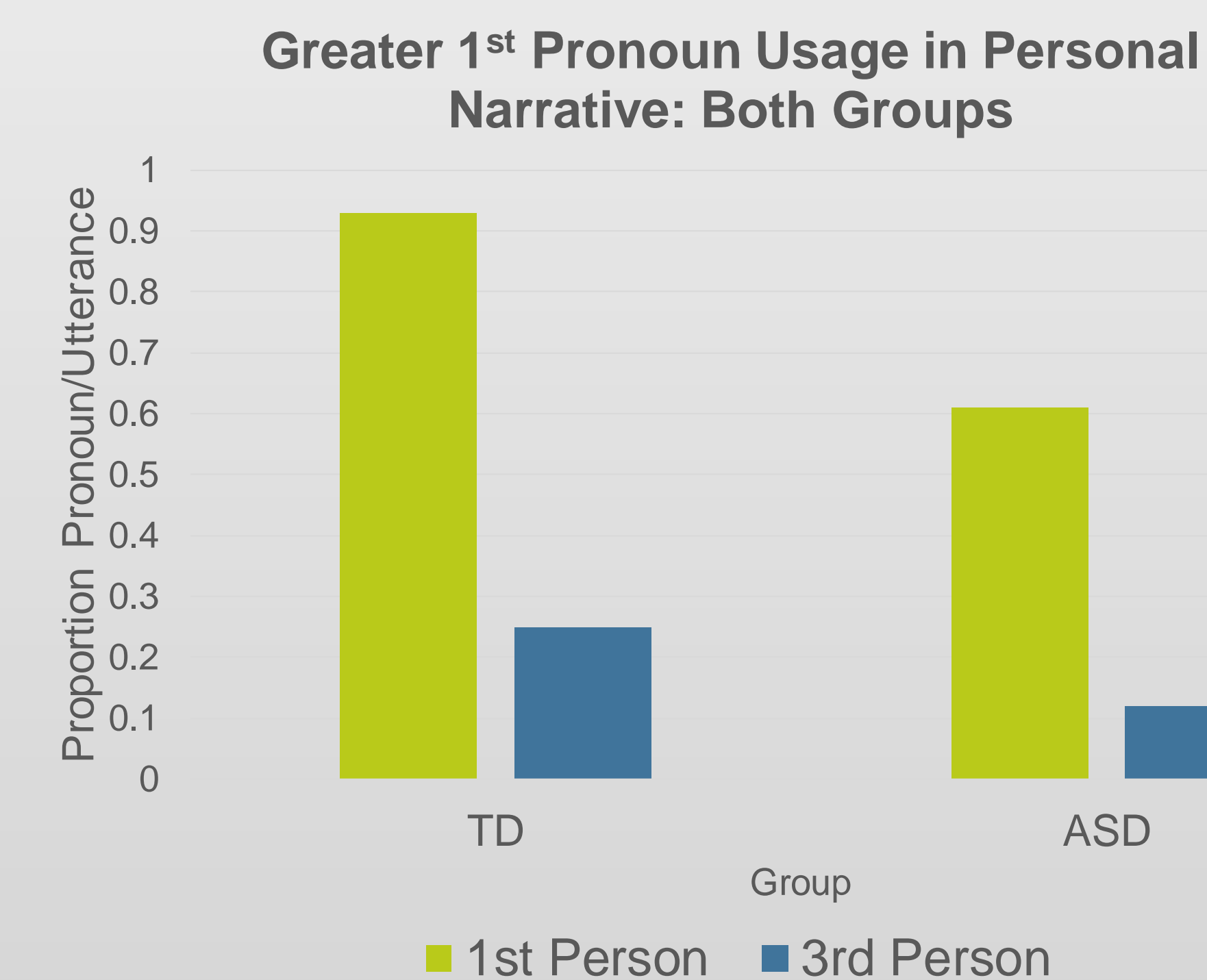
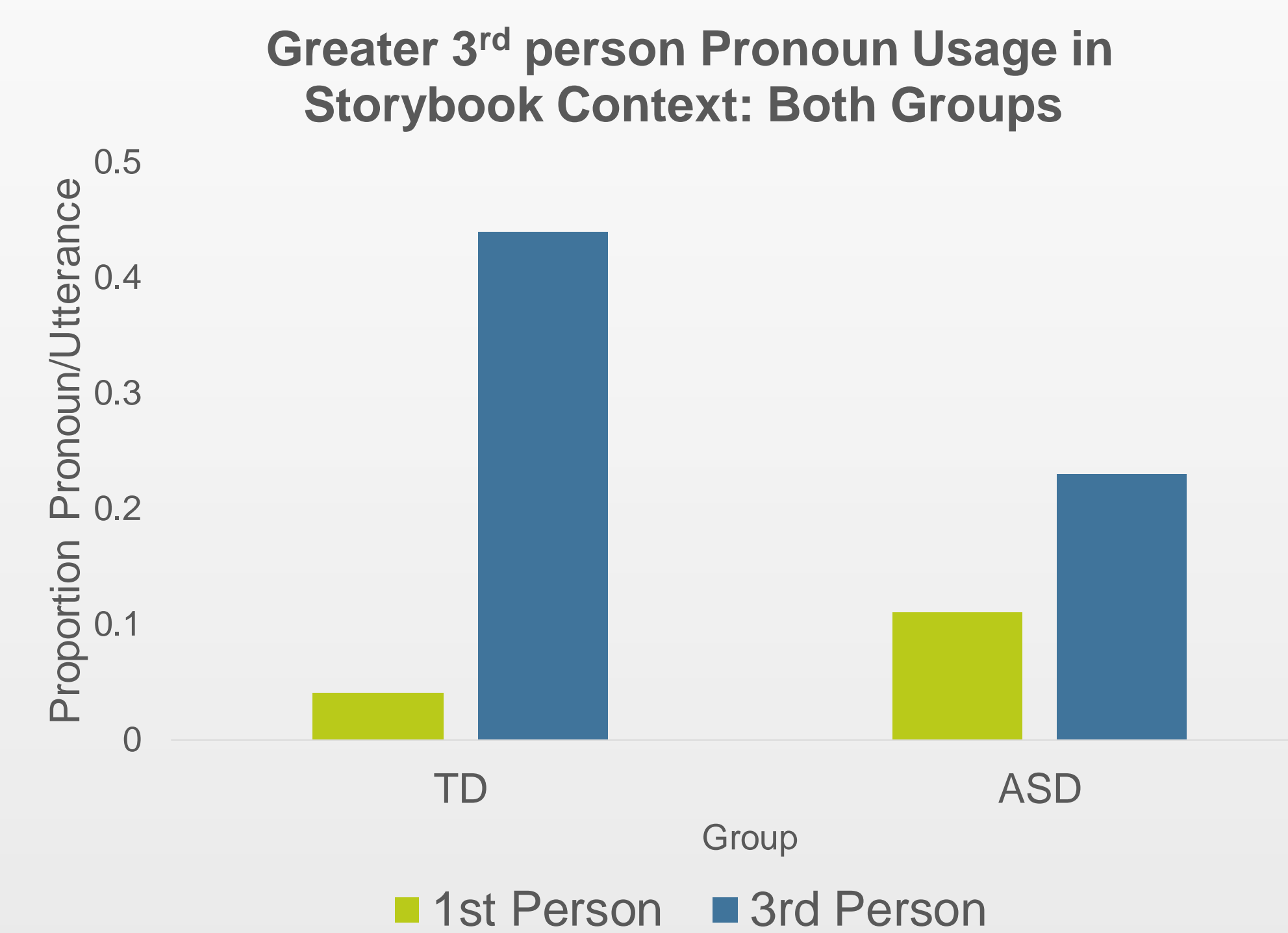
MLU: TD > ASD in both storybook and personal narratives

	TD	ASD	Significance
Storybook	11.72 (5.01)	6.77 (3.96)	NS
Personal	9.85 (3.38)	6.69 (5.78)	NS

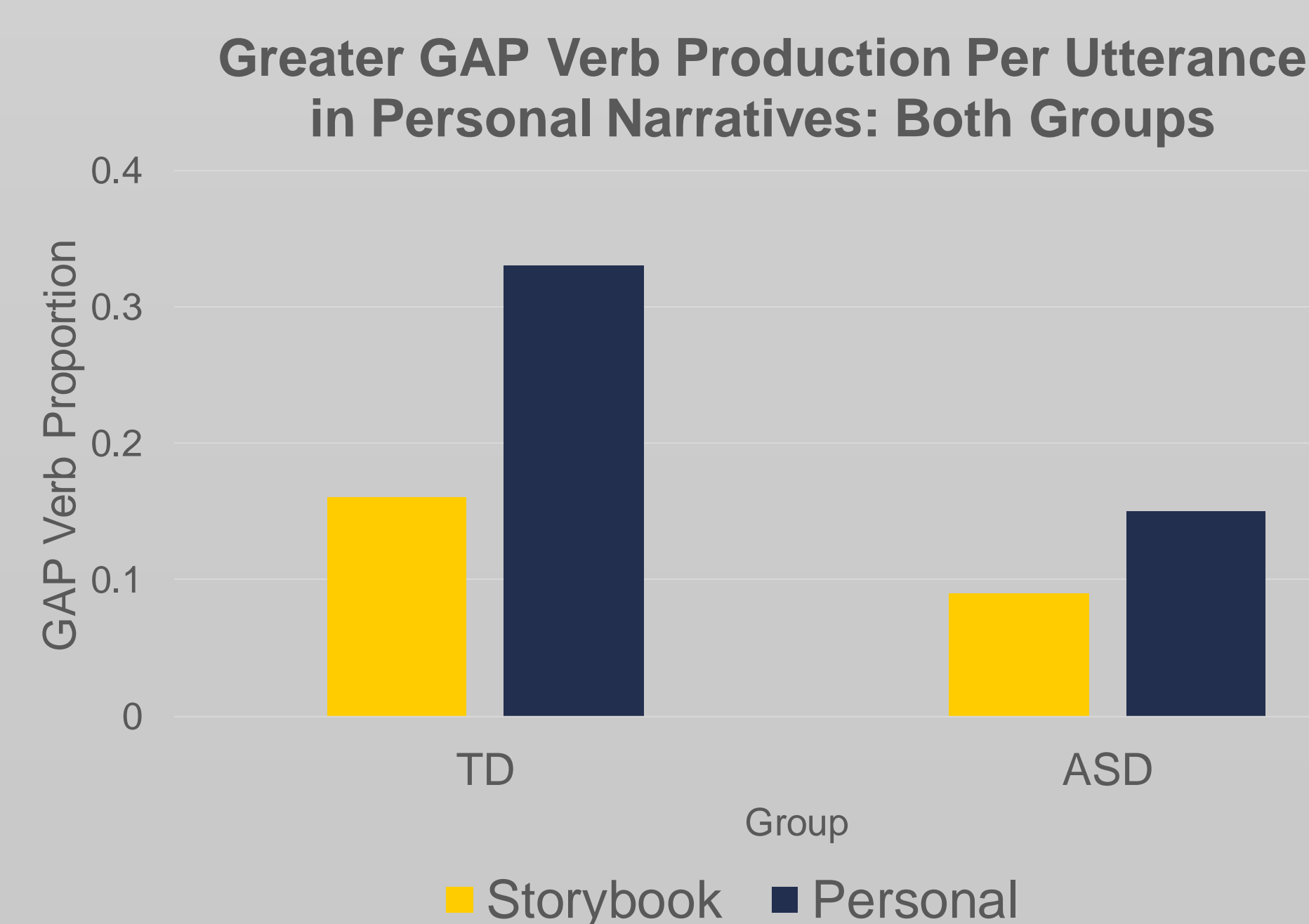
utterances: ASD > TD in storybook, but TD > ASD in personal narratives

	TD	ASD	Significance
Storybook	30.8 (14.69)	41.8 (20.41)	NS
Personal	16.2 (10.92)	10.0 (5.1)	NS

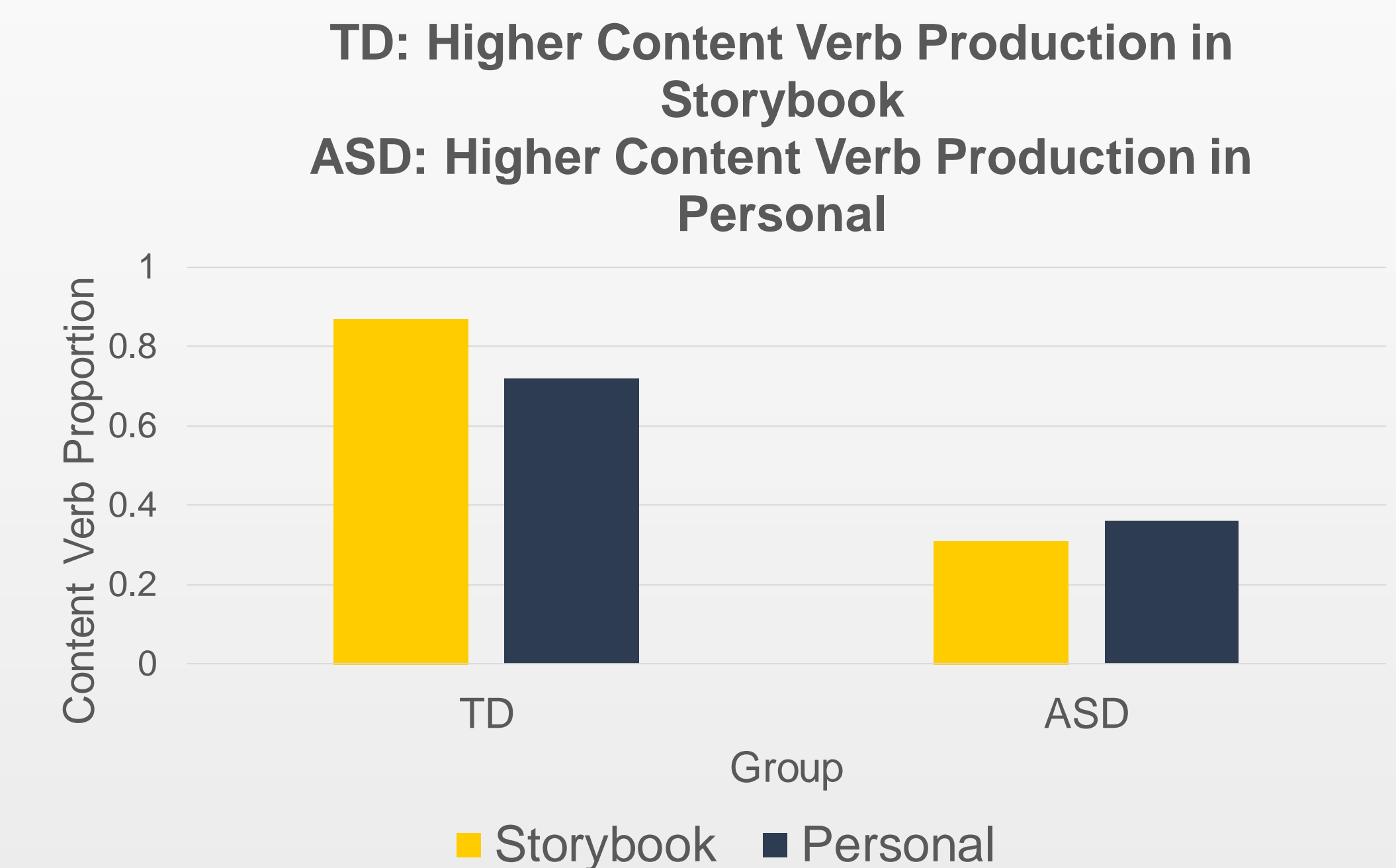
Results, continued



- TD children used more pronouns than children with ASD in both contexts
- The groups did not differ in their greater use of 3rd person in storybook and 1st person in personal narratives



Results, continued



Discussion and Conclusion

- As expected given their standardized language levels, TD teens' narratives included more words and longer utterances than the teens with ASD's, in both contexts.
- Nonetheless, **similar context effects for pronoun usage** by were seen in both groups (storybook → 3rd person, personal → 1st person)
- Both groups also produced a preponderance of GAP verbs during their personal narratives
- However, while TD teens produced more content verbs in storybook narratives, **teens with ASD produced more content verbs in personal narratives. The storybook context led to more object labeling**
- These preliminary findings **support the need to collect both personal & storybook narratives → a complete picture of language use in ASD**
- Data collection, suspended due to COVID-19, has recently recommenced. Future analyses will examine pronoun and verb usage in closer detail, and include all 4 personal narratives

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Participants

	Age	Sex Ratio (M:F)	Mean Age Equivalent Score CELF-IV	Mean Age Equivalent Score DAS-II
TD (n = 7)	14.82 (2.95)	4:3	>21:5	16:5
ASD (n = 6)	16.60 (3.50)	5:1	10:4	9:5

- All primary English speakers