

Writing development in children with language difficulties – An analysis of product and process.

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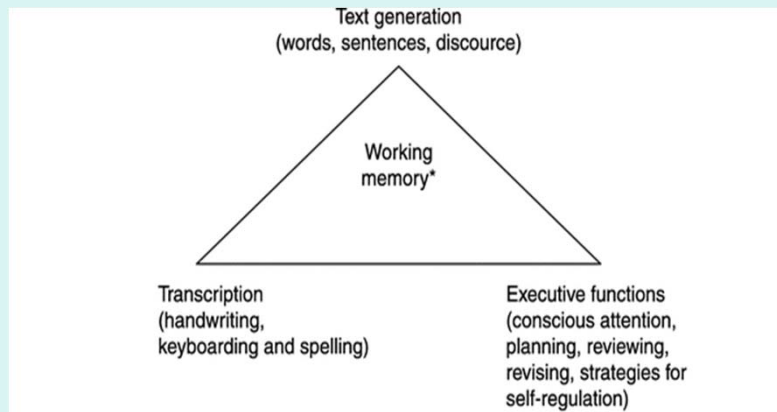


Psychology &
Human Development

Why might spelling support written text production? – evidence from children with specific language impairment (SLI)

- Children with SLI
 - Specific problems or disorders in comprehending or producing speech and a delayed learning of language
 - Problems associated with limited processing, grammar, phonology & the lexicon
 - Poor at transcription (Spelling & Handwriting) as well as Text Generation (Connelly, Dockrell & Barnett, 2011)

Production of written text



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Note. *Activates long term memory during composing and short term memory during reviewing.

Participants

SLI -Specific language impairment

N = 34 with a specific language impairment

Primary/elementary school **10.1 years old**

Significant gap between language and non-verbal ability

Literacy difficulties – including reading, spelling and text production

CA – matched on chronological age

N = 34

Primary/elementary school **10.1 years old**

LA – matched on CELF

N = 34

No significant differences in spelling raw score

No significant differences in non-verbal ability standard score

Significantly younger Primary/elementary school **8.2 years old**

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Example Essays Age 11 SLI

WORLD RESPONSE BOOKLET

Written Expression

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Prompt 1 or 2
(Circle one.)

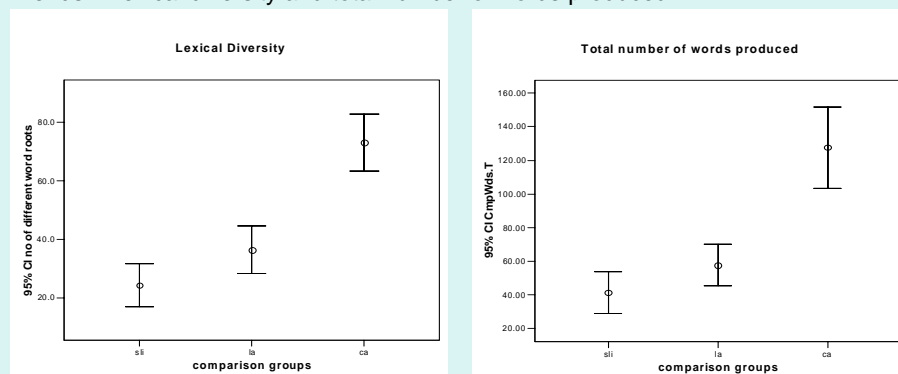
Dear 20xw e e one
I want a hours with 4 Bed'rooms
and 2 ceing and in west green.
and 3 mat's. and a G.
From Sam

Example Essay at age 11 CA Match

Dear Sir,
I would like a detached house.
with two bath rooms. One 100cm by 50cm
living room. Also a kitchen 50cm by 20cm with
six cupboards made by hard thick wood.
Five Bedrooms. Four of them with double
beds and one with a single bed. In every
bed room I would like a door on every
room and a cupboard in every bedroom.
In the kitchen also a double cooker with
a grill (a electric cooker please) Down stairs
I want my kitchen and three bedrooms with
my living. Upstairs I would like one bathroom
and the other three bedrooms and my
and one of my
my bath-
rooms.
I hope to see you in 11 - far further

Text measures

No difference in overall scores for the compositions between SLI and LA match.
Trends in lexical diversity and total number of words produced.



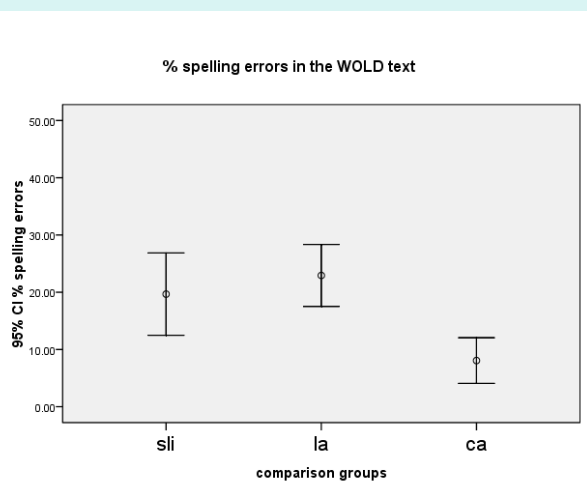
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Spelling

Total Spelling Errors

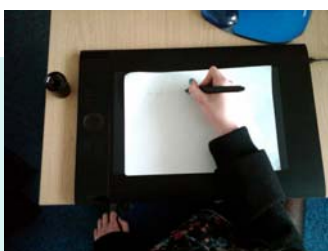
(SLI=LA)>CA

Large amount of spelling errors in texts of SLI and LA group.



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yesterday I had the best weekend because I went to a theme park with my dad on Sunday and on Saturday my mum bought me a game for my PSP it was called zombies is a game where you have to kill all zombies and save your son. my escape world best you get killed so that was my



is standing

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Pause and Burst Analysis

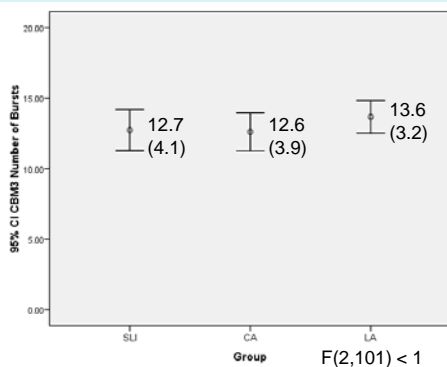
yesterday I had the best weekend because I went to a theme park with my dad on Sunday and on Saturday my mum bought me a game for my PSP it was called zombies is a game where you have to kill all zombies and save your son. my escape world best you get killed so that was my

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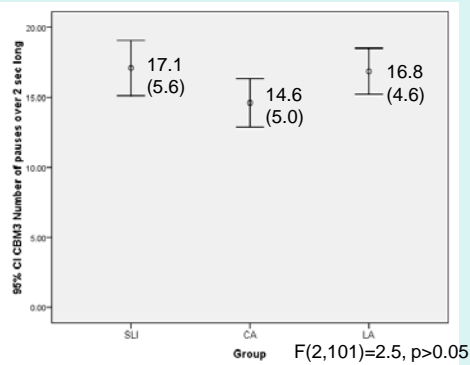
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Pause & Writing Burst Analysis

Number of Writing Bursts



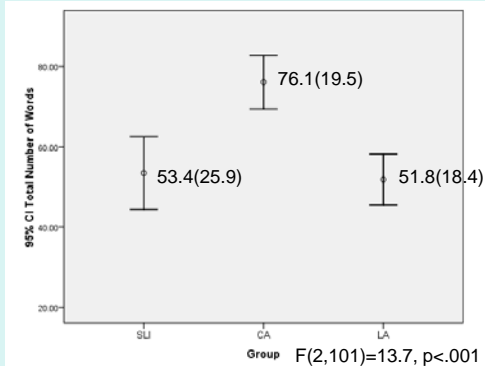
Number of Pauses > 2 sec



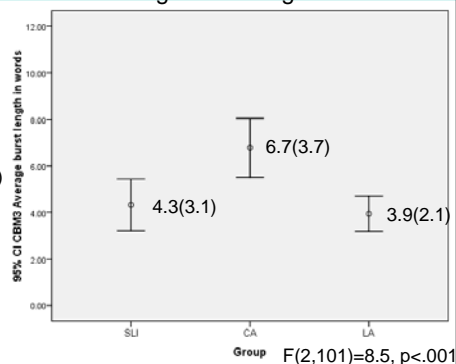
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Pause & Writing Burst Analysis

Number of words written



Average burst length in words

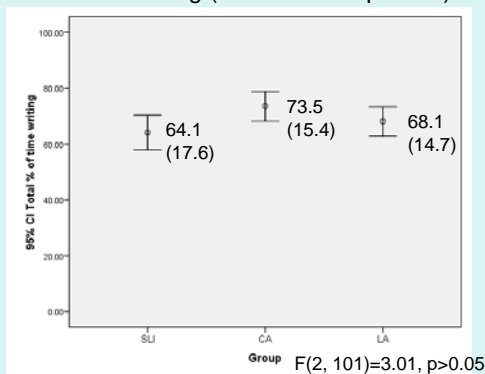


Significant diff in number of words reflects similar difference in average burst length

12 Correlation: Number of words written with Av burst length. $r(102)=0.80, p<0.01$

Pause & Writing Burst Analysis

Total time writing (minus >2 sec pauses)



No Significant difference in writing time (trend only).

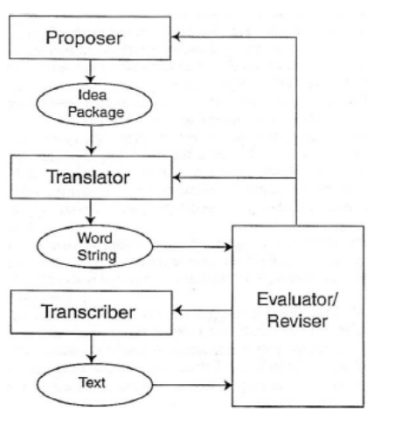
No Significant difference in number of bursts

No Significant difference in number of pauses

Spelling errors (SLI=LA)>CA

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Model of the Text Production Process



Hayes & Chenoweth (2007)

Burst length constrained by translator in adults.

Not related to copying skills

Our results would indicate that the transcriber (as measured through spelling and handwriting) significantly linked to burst length in children.

Source: Chenoweth and Hayes (2003, p. 113).

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