

# Effects of Home Language and Language of Instruction in sub-Saharan Africa

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# Introduction

- ❖ **Education Sustainable Development Goals target (4.1):**  
**“all girls and boys [will] complete free, equitable and quality primary and secondary education”.**
- ❖ **Quality Education – know how to read.**
- ❖ **Learning Poverty – defined by International/ Regional Assessments. (PIRLS, TIMSS, PASEC)**  
**“86% of children in sub-Saharan Africa (SSA) suffered from learning poverty” UNESCO 2019**

# Introduction

- ❖ **Sub-Saharan Africa – multilingual.**
- ❖ **Literacy attainment and home-school language.**

# The Driving Issue

- ❖ **“Most children appear to be learning almost nothing in the first three grades.”**(UNESCO 2025)
- ❖ **If students fall behind during grade 1, they may be unable to catch up.** (Abadzi & Martelli, 2014)
- “Not being able to decode well in grade 1 predicted 88 percent of the poor readers in grade 4.”**(Wolf 2007)

# Language of Instruction

- ❖ “In whose language could [students] not read a simple sentence?” (Brock-Utne 2014)
- ❖ Home (*native*) language is critical to improve learning outcomes. (UNESCO 2024)
- ❖ At the same time: “*Mother tongue won’t help you eat.*” (Gellman 2020)

# What are we doing?

❖ UNICEF reports.

## *Our Main Questions*

1. Consent to foundational learning skills *[FLS]*?
2. Consent to read?
3. Home language, language of instruction, and foundational reading skills *[FRS]*?

# Data & Methods

## Data

**FLS  
Module  
of  
MICS**

**17  
SSA  
Countries**

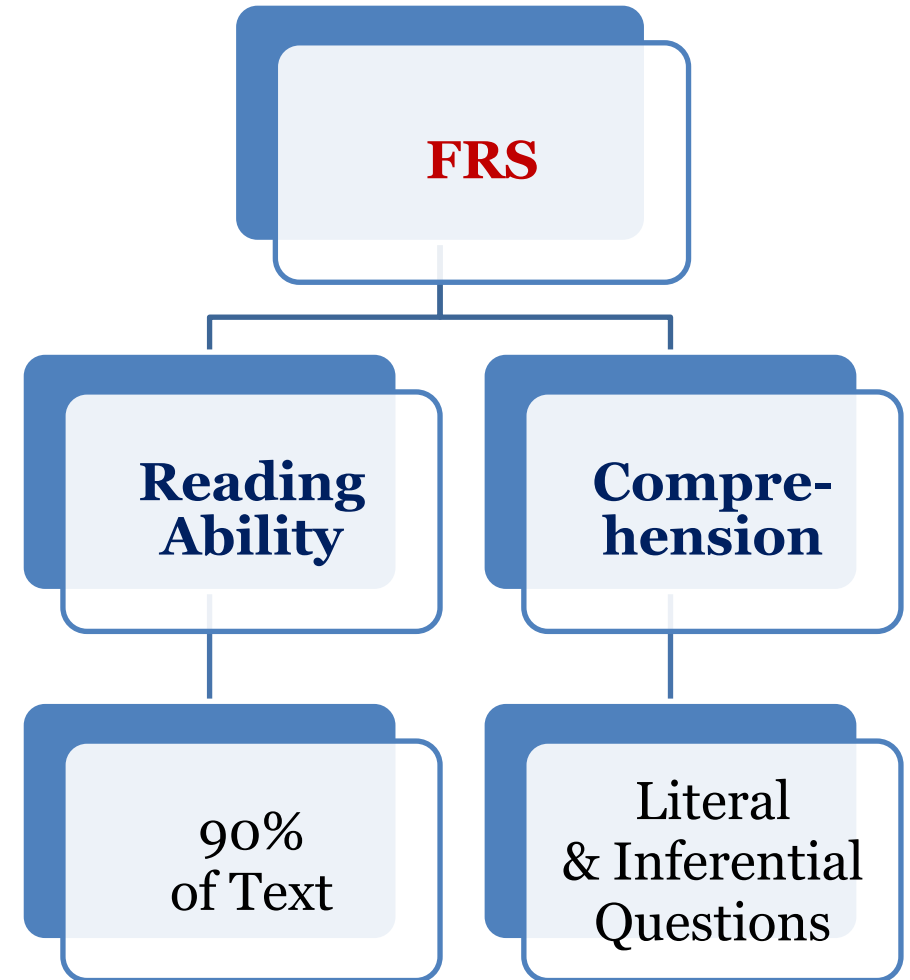
## Focus

**Young  
Children  
7-14  
Years Old**

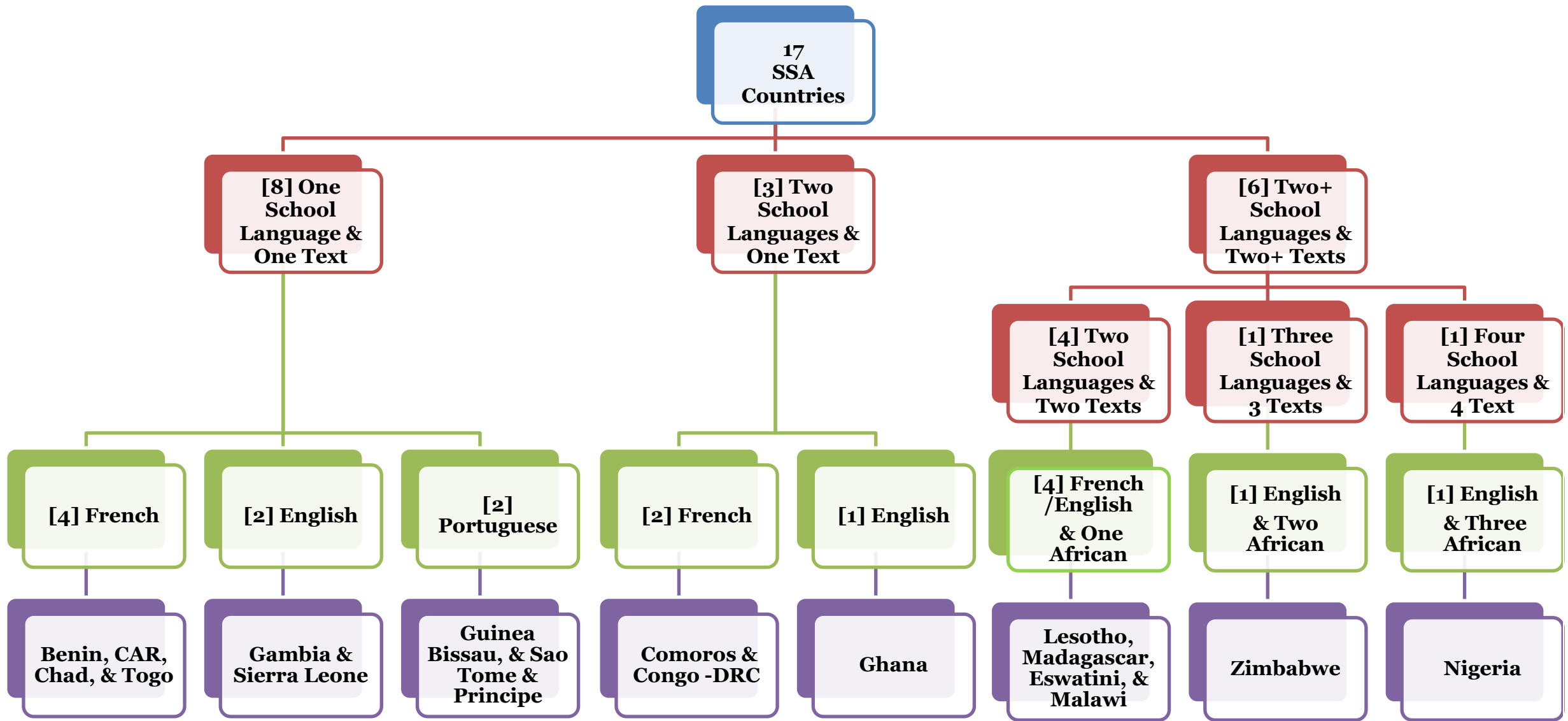
**Home-  
School  
Language**

## Out- come

**Founda-  
tional  
Reading  
Skills  
[FRS]**



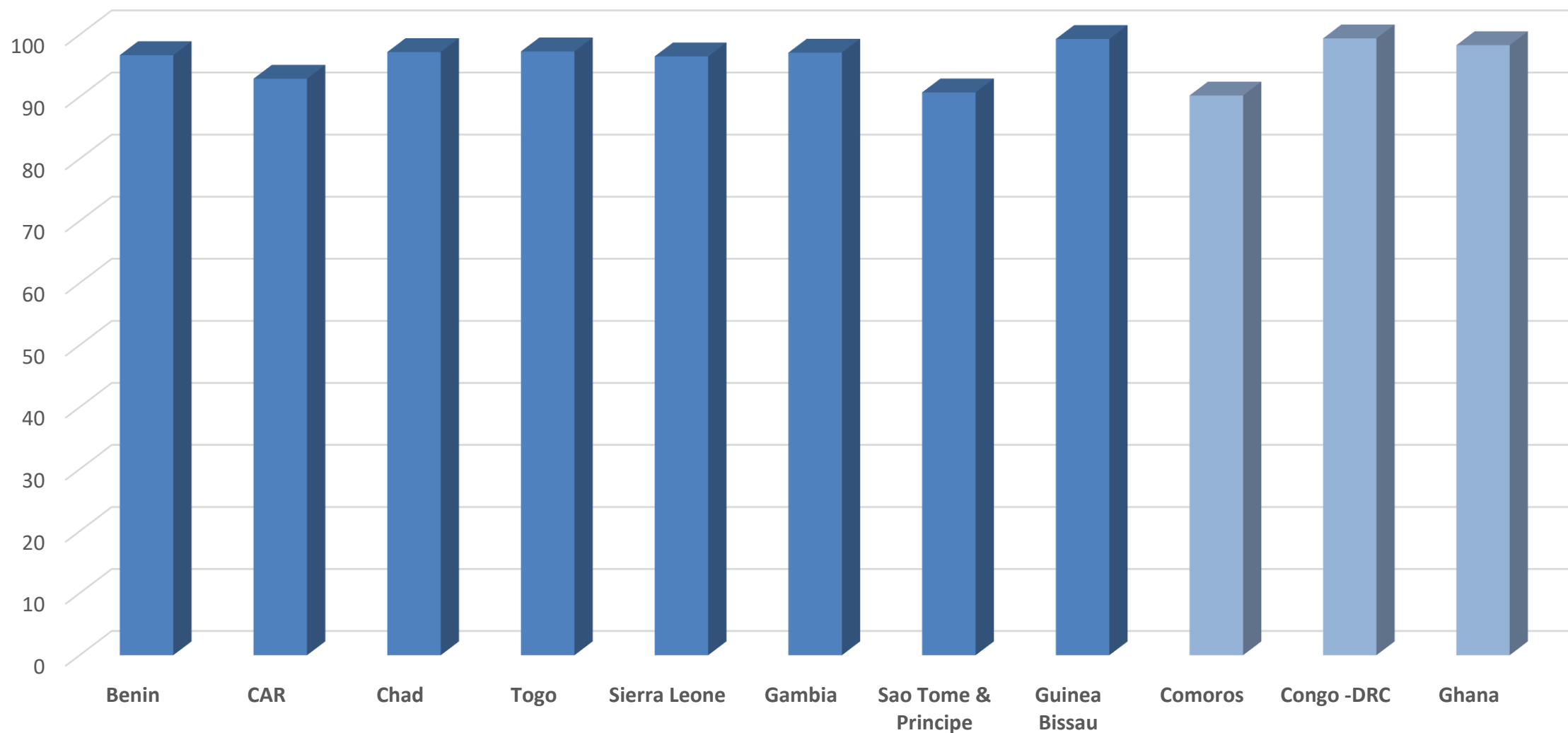
***Descriptive & Multivariate Statistics***



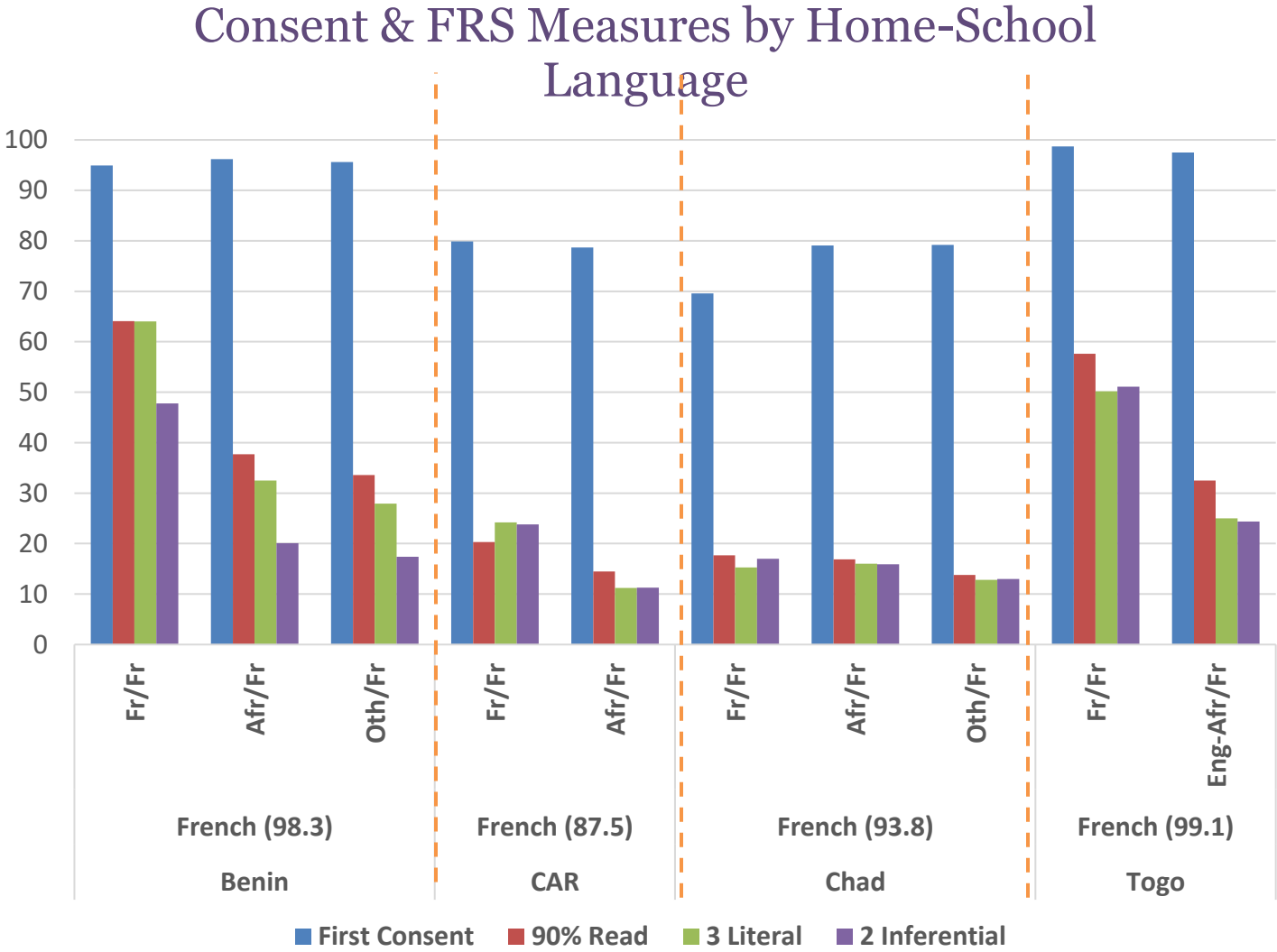
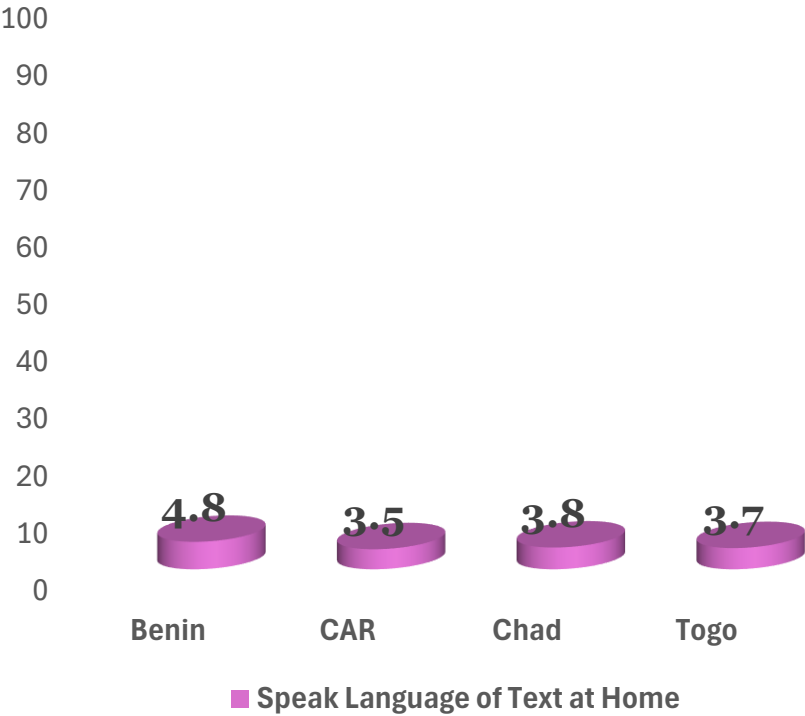


# **Simple & Bivariate Descriptive Statistics**

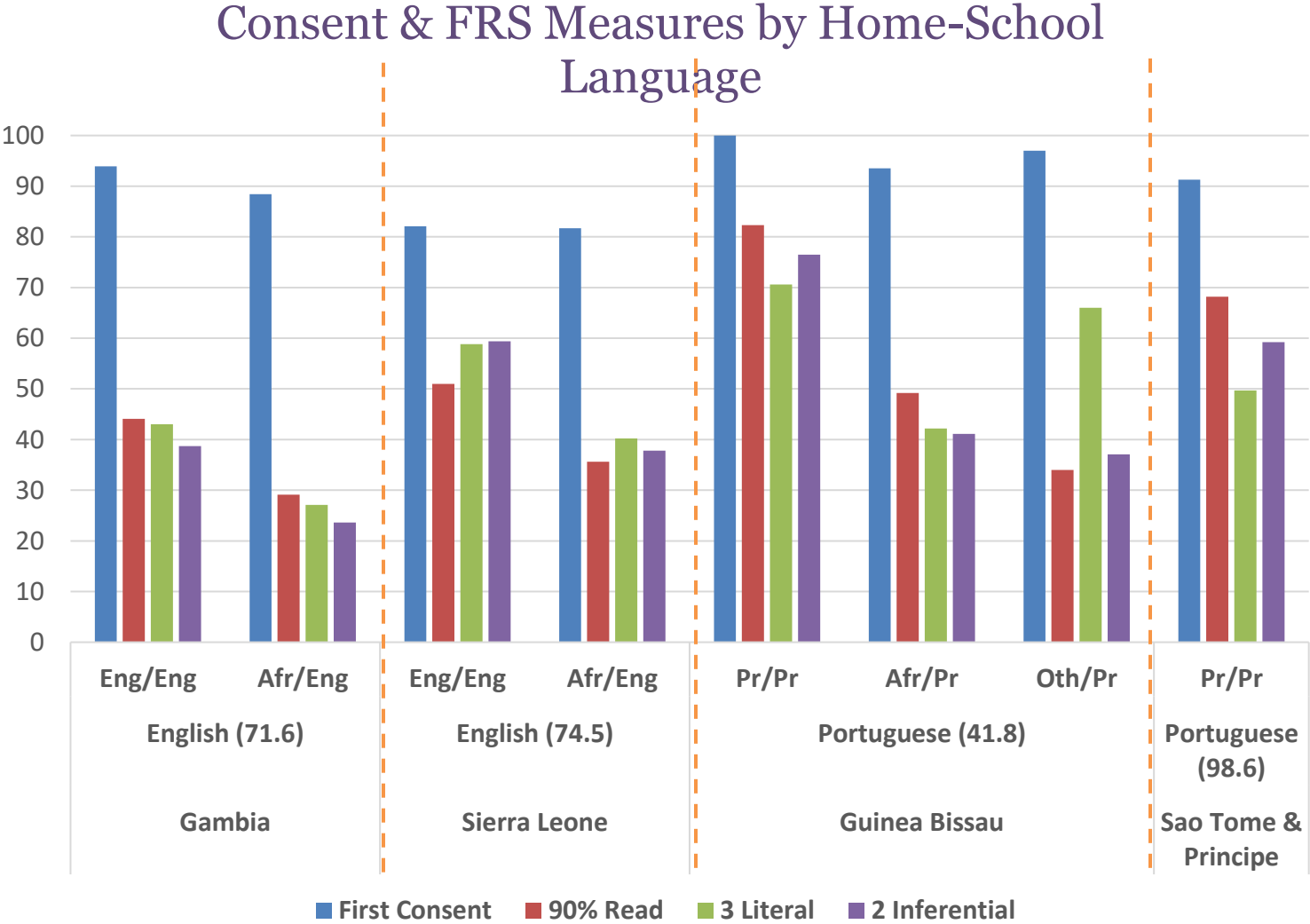
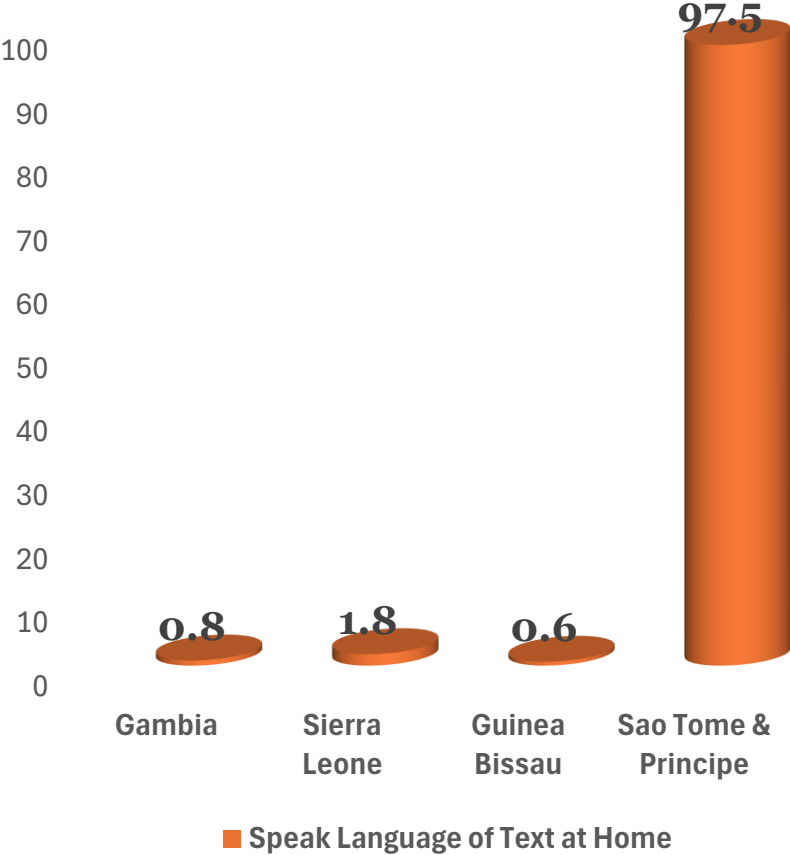
# One *[Colonial]* Text: FLS Consent



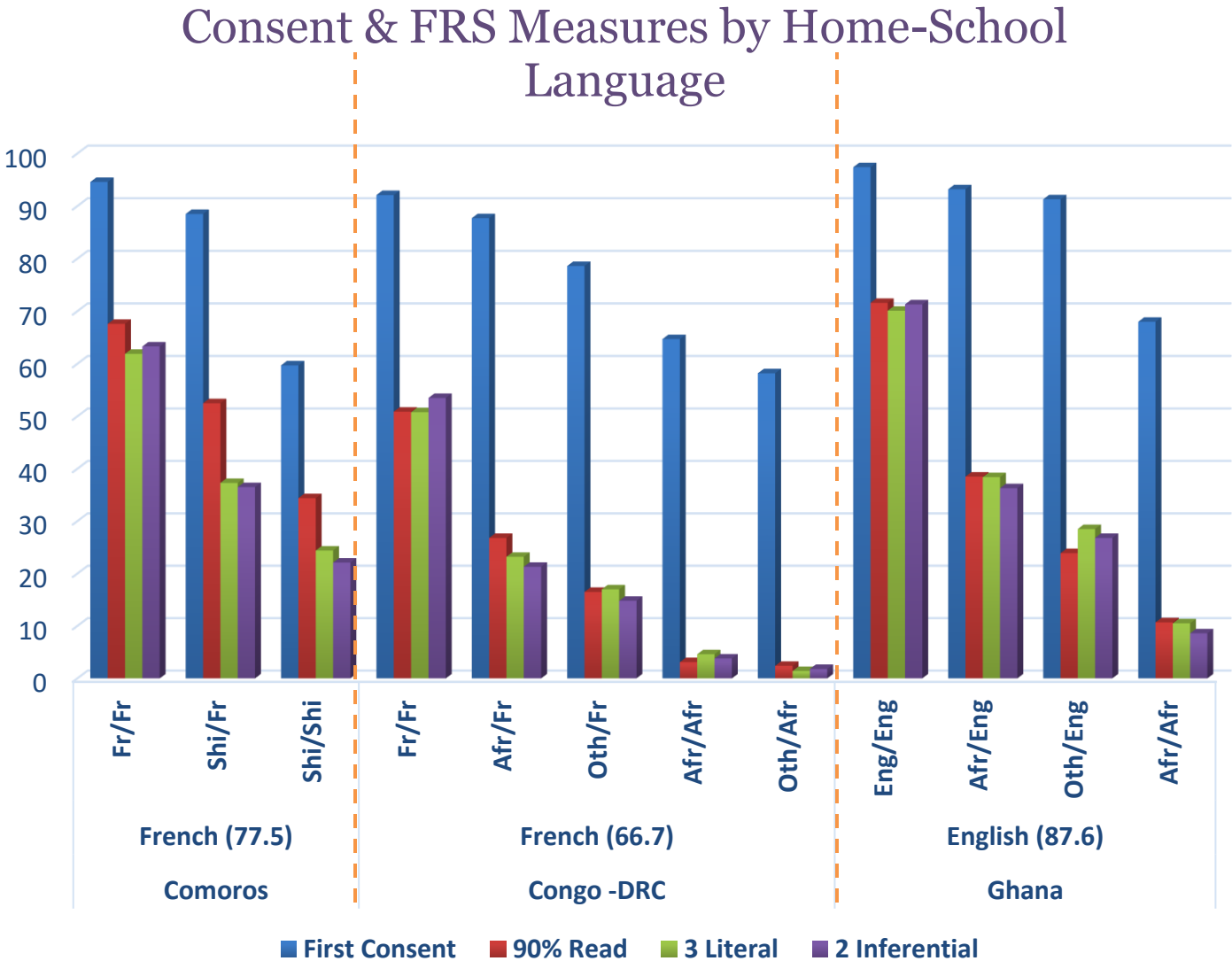
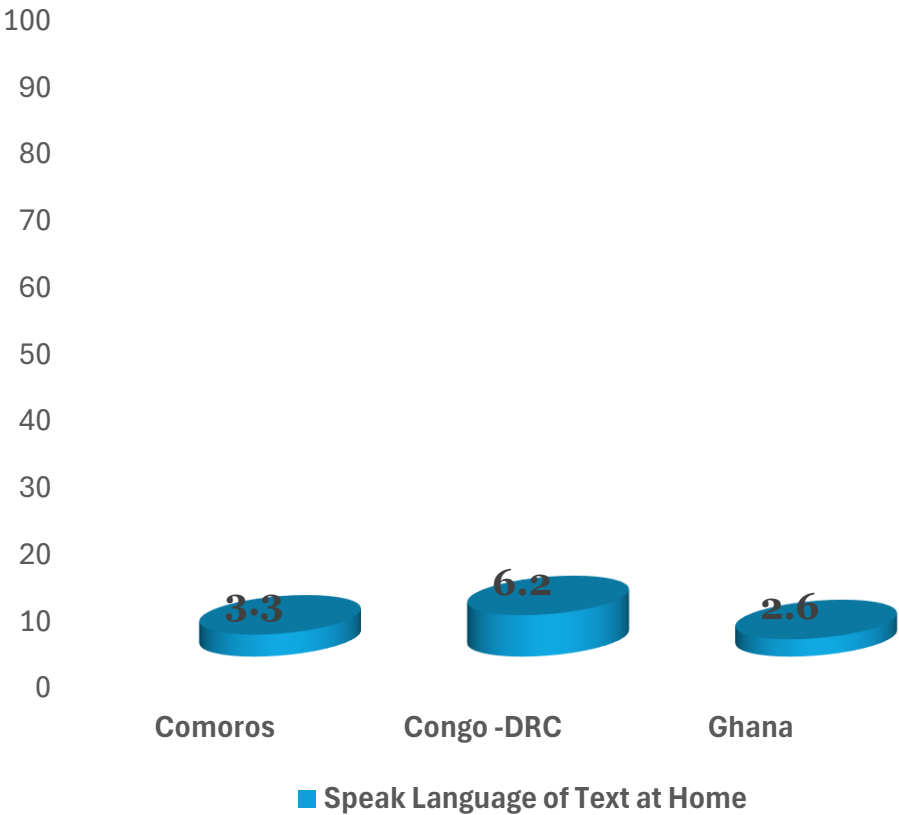
# One School Language *[French]* & One Text



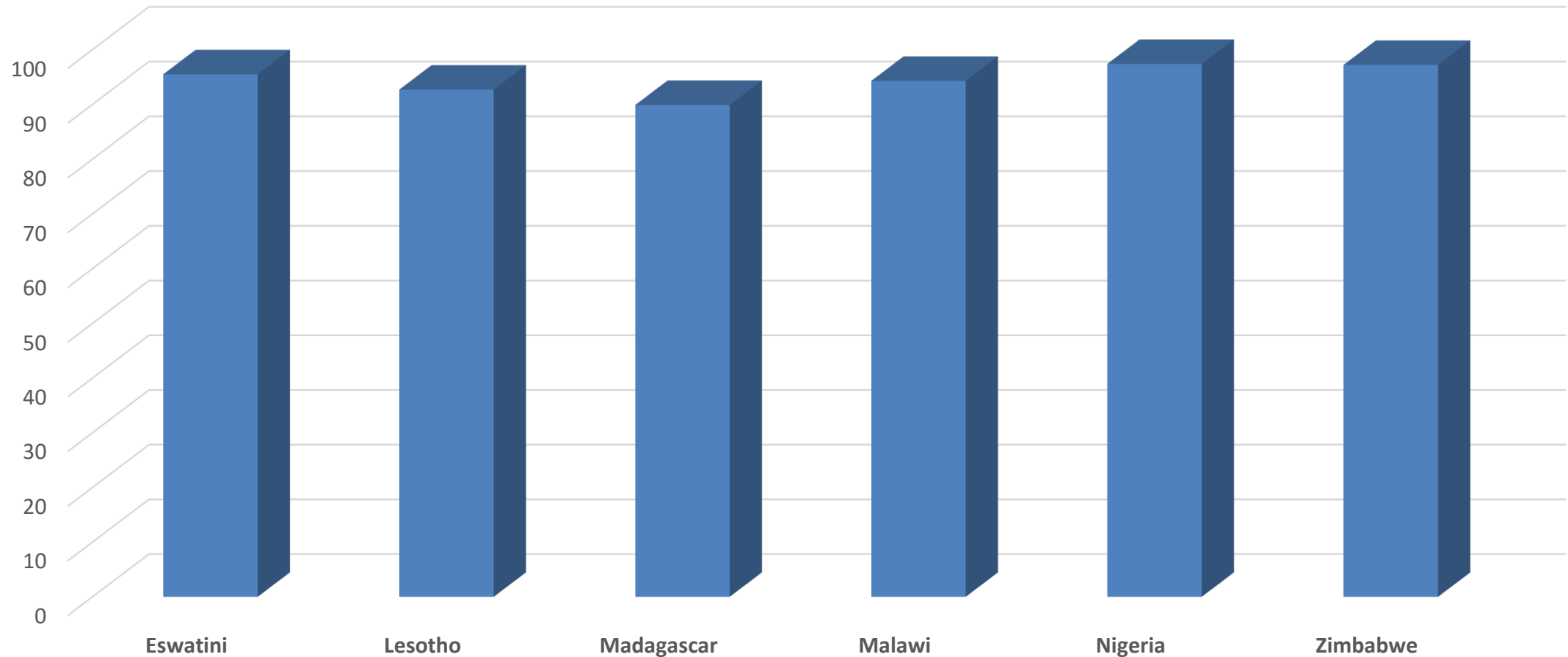
# One School Language [*English/Portuguese*] & One Text



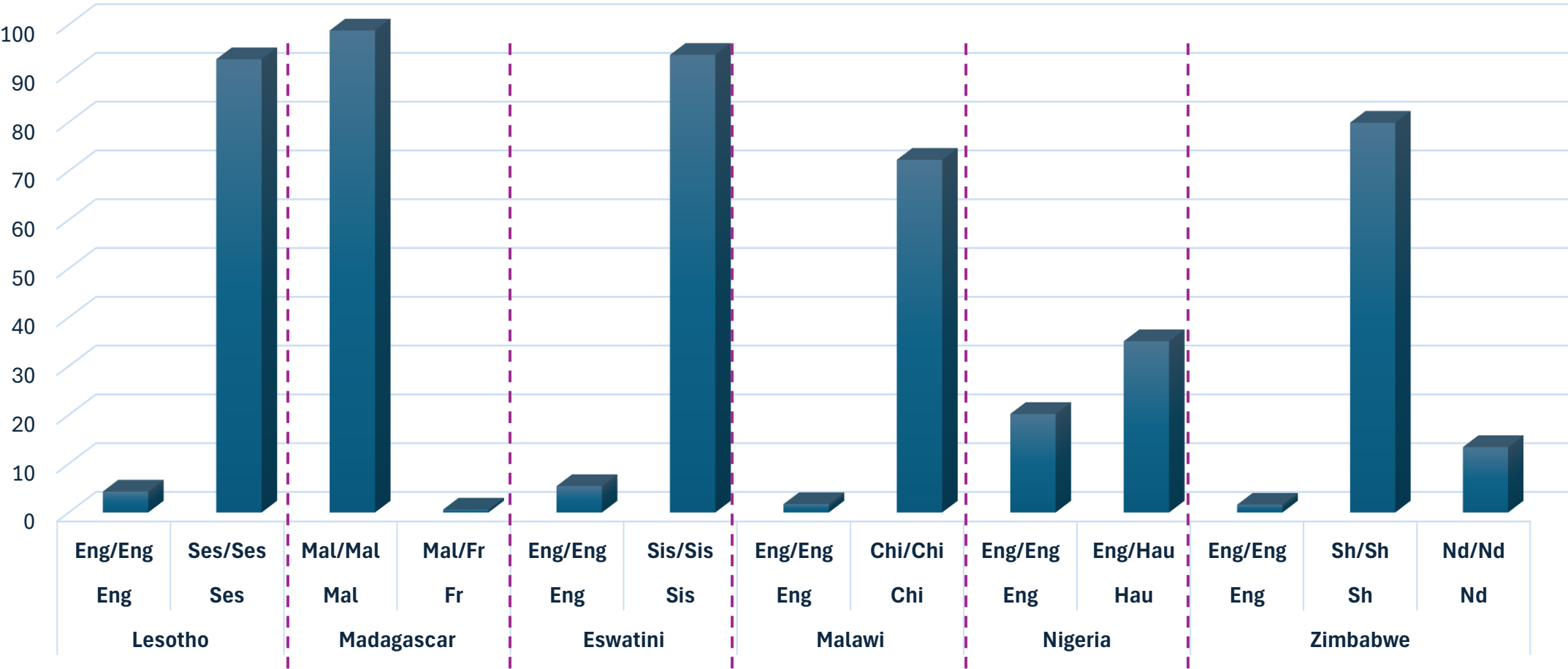
# Two School Languages [Colonial/African] & One [Colonial] Text



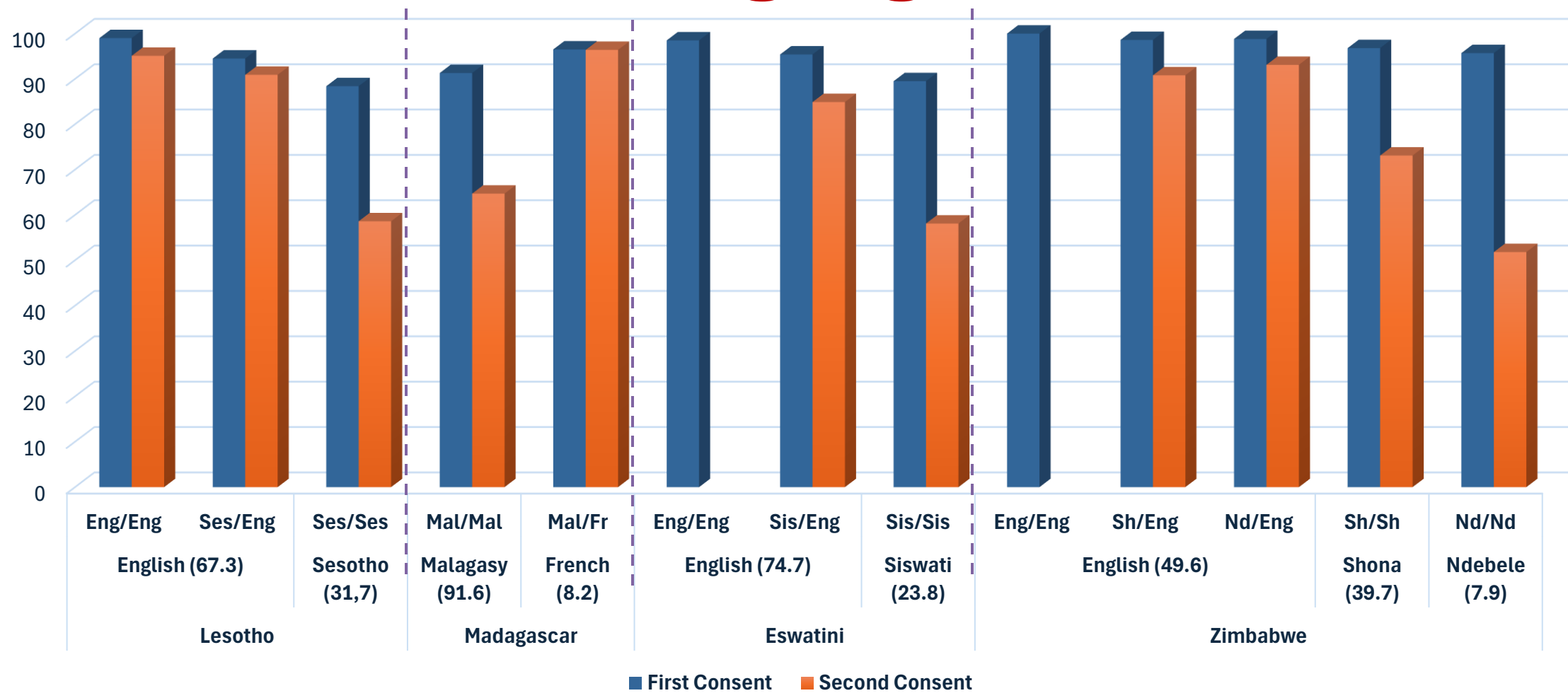
# Two+ School Languages [*Colonial/African*] & Two+ Texts: FLS Consent



# Home-School Language & Speak Language of the Text at Home

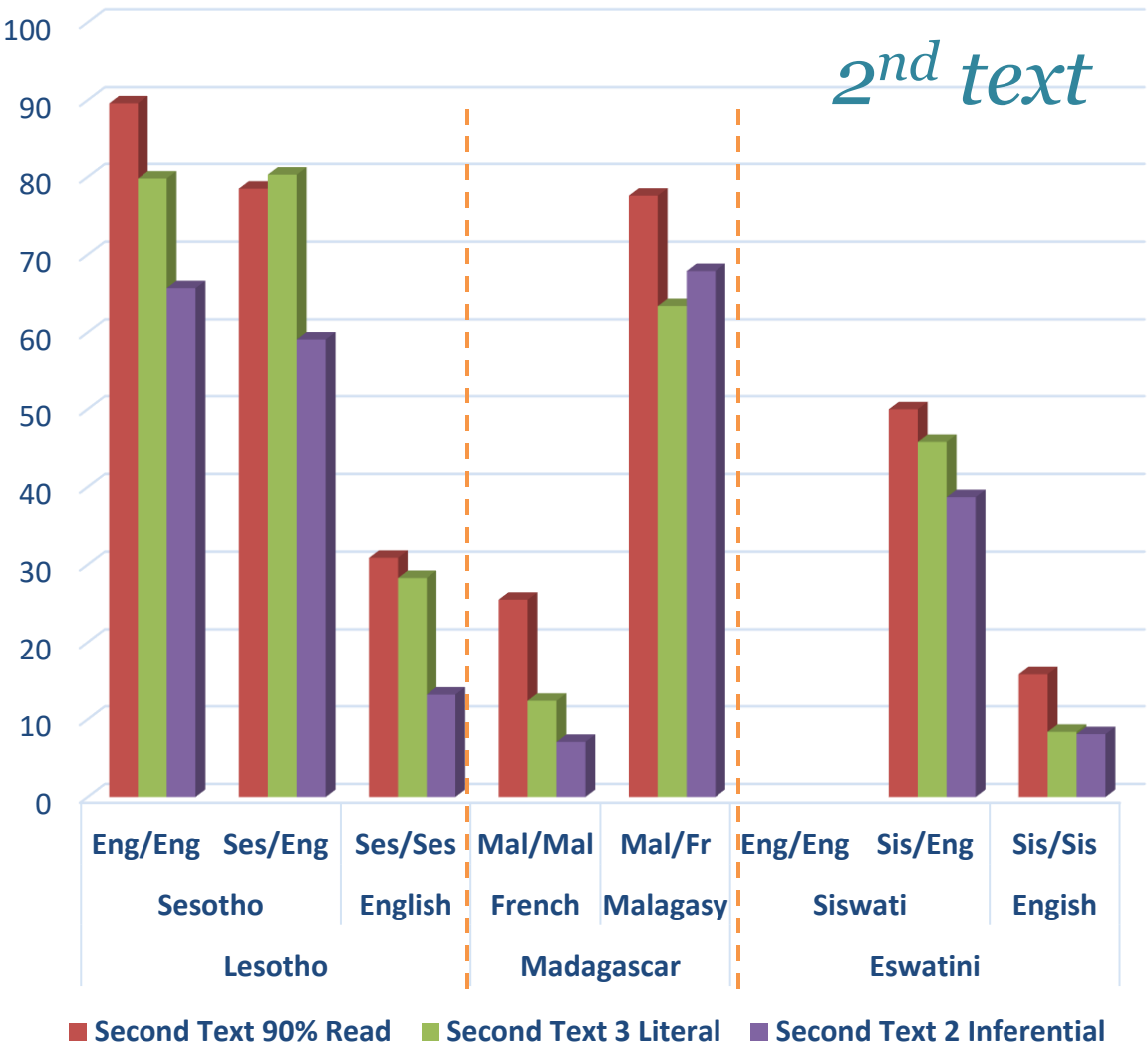
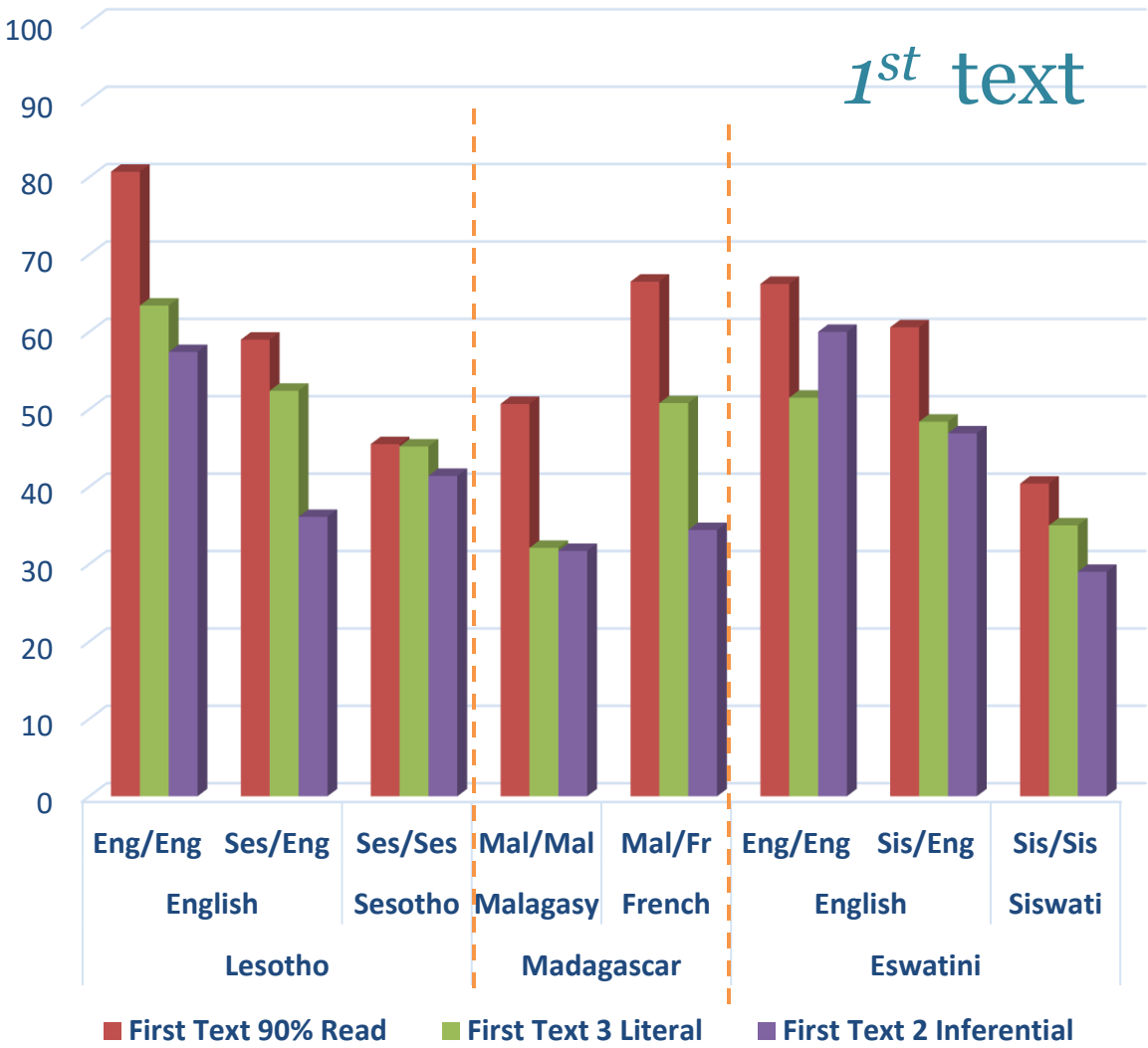


# Two+ School Languages [Colonial/African] & Two+ Texts: Consent by Home-School Language





# Two School Languages [Colonial/African] & Two Texts: FRS by Home-School Language



# **Multivariate Logistic Models**

# Odds Ratios: Child Consent

	Lesotho			Madagascar		
	FLS	First Read Consent	Second Read Consent	FLS	First Read Consent	Second Read Consent
<b>Functional Difficulties</b> [reference = Yes]						
<b>No</b>	<b>1.75*</b>	1.11	0.72	<b>1.37*</b>	1.41	0.99
<b>School Language</b> [reference = African]						
<b>Colonial</b>	-	<b>1.53*</b>	<b>6.93**</b>	-	1.74	<b>7.15**</b>
<b>Child Read Books</b> [reference = No]						
<b>Yes</b>	-	<b>2.31**</b>	<b>1.71**</b>	-	<b>3.25**</b>	<b>2.27**</b>
<b>Age</b> [reference = 7-9]						
<b>10-14</b>	0.84	<b>1.63*</b>	<b>2.29**</b>	0.84	1.13	<b>1.46**</b>
<b>Area of Residence</b> [reference = Urban]						
<b>Rural</b>	0.79	0.71	0.70	0.96	1.03	0.92
<b>Wealth Index</b> [reference = Poorest]						
<b>Second</b>	<b>1.84**</b>	1.28	1.44	1.01	<b>1.54**</b>	<b>1.48**</b>
<b>Middle</b>	1.53	<b>2.26**</b>	<b>2.02**</b>	1.13	<b>2.16**</b>	<b>1.82**</b>
<b>Fourth</b>	1.31	1.20	1.42	1.30	<b>3.27**</b>	<b>3.35**</b>
<b>Richest</b>	1.60	1.87	1.21	0.84	<b>3.38**</b>	<b>8.22**</b>
<b>Sex</b> [reference = Male]						
<b>Female</b>	1.10	<b>1.70**</b>	<b>1.69**</b>	1.14	<b>1.29*</b>	<b>1.18*</b>
<b>Mother Education</b> [reference = none]						
<b>Primary</b>	-	-	-	0.97	<b>1.33*</b>	1.07
<b>Secondary or higher</b>	0.77	<b>1.60*</b>	0.99	0.75	<b>2.08**</b>	1.02

\*\* P-value < 0.01, \* P-value < 0.05

# Odds Ratio: FRS by School Language: Madagascar

	First Text			Second Text		
	Read 90%	3 Literal	2 Inferential	Read 90%	3 Literal	2 Inferential
School Language [reference = Malagasy]						
French	0.71	0.92	0.34**	8.34**	7.40**	19.25**
Child Read Books [reference = No]						
Yes	2.67**	1.84**	1.83**	2.08**	1.45*	1.54
Age [reference = 7-9]						
10-14	11.07**	6.86**	6.64**	11.73**	5.56**	5.42**
Area of Residence [reference = Urban]						
Rural	0.99	1.25	1.03	1.47*	1.05	1.66
Wealth Index [reference = Poorest]						
Second	1.71**	1.72**	1.66**	2.26**	2.23*	2.19
Middle	2.92**	3.00**	2.76**	3.89**	1.62	2.51
Fourth	4.12**	3.94**	3.76**	9.50**	8.36**	8.82**
Richest	11.79**	11.51**	11.19**	39.62**	19.49**	33.74**
Sex [reference = Male]						
Female	1.50**	1.27*	1.32**	1.44**	1.31	1.39
Mother Education [reference = none]						
Primary	1.42**	1.89**	1.82**	1.53*	1.19	1.49
Secondary or higher	2.11**	2.33**	2.79**	1.89**	1.87*	2.63**

\*\* P-value < 0.01, \* P-value < 0.05

# Odds Ratio: FRS by School Language: Lesotho

	First Text			Second Text		
	Read 90%	3 Literal	2 Inferential	Read 90%	3 Literal	2 Inferential
<b>School Language</b> [reference = Sesotho]						
English	0.85	1.42*	0.73*	10.96**	4.39**	8.09**
<b>Child Read Books</b> [reference = No]						
Yes	1.54**	1.45**	1.43**	2.22**	1.77**	1.60**
<b>Age</b> [reference = 7-9]						
10-14	12.05**	10.24**	8.97**	20.05**	11.12**	6.46**
<b>Area of Residence</b> [reference = Urban]						
Rural	0.83	0.74	0.73	0.84	0.74	0.95
<b>Wealth Index</b> [reference = Poorest]						
Second	1.36	1.33	1.37	1.58	1.49	1.41
Middle	1.87**	1.96**	1.43	2.61**	2.47**	2.28**
Fourth	1.39	1.38	1.64*	2.22**	1.62*	1.68*
Richest	4.65**	4.18**	3.71**	5.07**	3.28**	3.02**
<b>Sex</b> [reference = Male]						
Female	2.20**	2.14**	1.90**	3.41**	2.43**	1.85**
<b>Mother Education</b> [reference = none]						
Primary	--	--	--	--	--	--
Secondary or higher	1.77**	1.71**	1.49**	1.42	1.35*	1.30

\*\* P-value < 0.01, \* P-value < 0.05

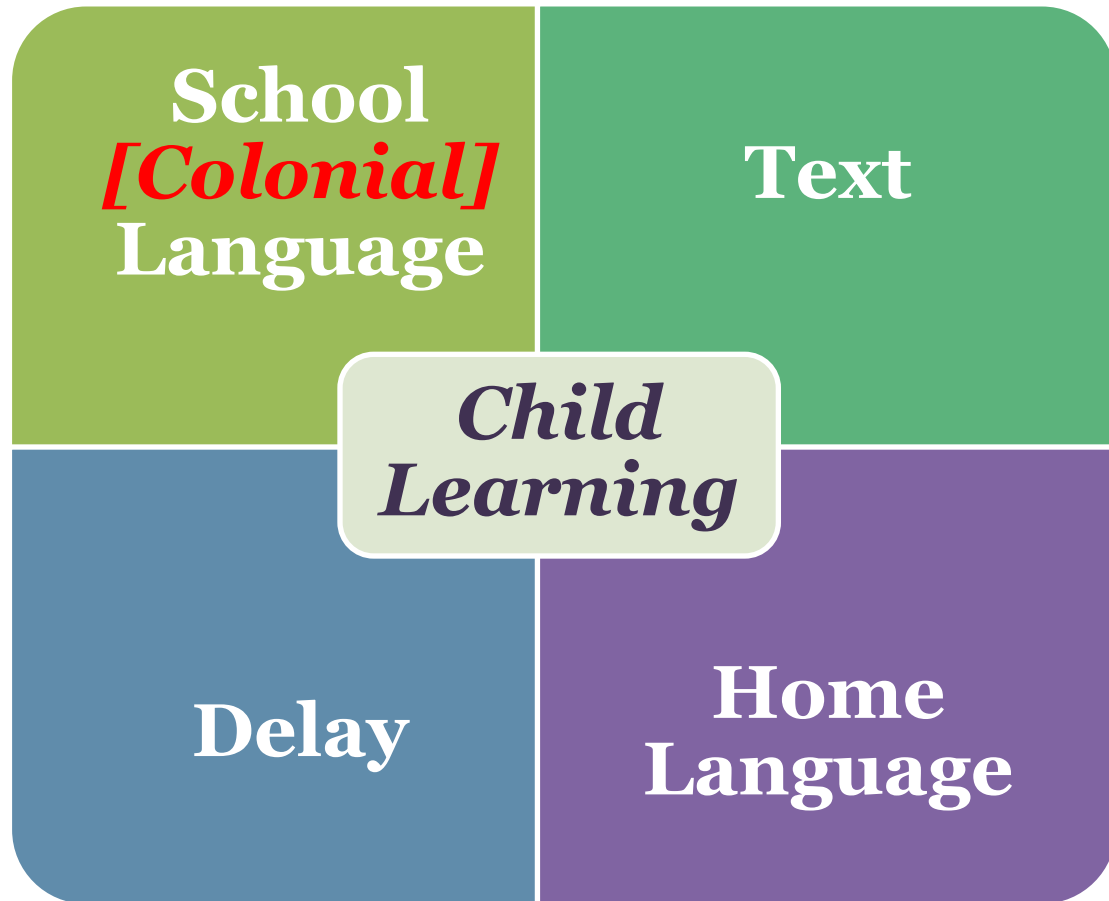
# Odds Ratio: FRS by Home-School Language

	Lesotho					
	First Text			Second Text		
	Read 90%	3 Literal	2 Inferential	Read 90%	3 Literal	2 Inferential
<b>School Language</b> [reference = Sesotho-Sesotho]						
English-Sesotho	0.15**	0.20	0.23	0.24	0.35	0.89
Sesotho-English	0.80	1.40*	0.71*	10.76**	4.33**	7.62**
English-English	1.86	1.79	1.48	16.50**	7.00**	18.21**
<b>Child Read Books</b> [reference = No]						
Yes	1.54**	1.45**	1.43**	2.22**	1.77**	1.60**
Controlling for: age, area of residence, wealth index, sex, and mother education						

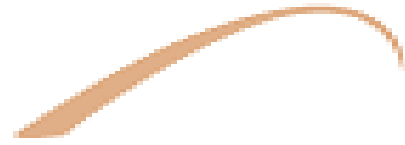
***	Madagascar					
	First Text			Second Text		
	Read 90%	3 Literal	2 Inferential	Read 90%	3 Literal	2 Inferential
<b>School Language</b> [reference = Malagasy-Malagasy]						
French-Malagasy	0.97	1.19	5.46*	1.37	0.30	--
Malagasy-French	0.70	0.92	0.34**	8.42**	7.65**	19.08**
French-French	1.56	1.22	0.65	6.37**	2.79	35.49**
<b>Child Read Books</b> [reference = No]						
Yes	2.67**	1.84**	1.83**	2.11**	1.51*	1.62*
Controlling for: age, area of residence, wealth index, sex, and mother education						

\*\* P-value < 0.01, \* P-value < 0.05

# Conclusion & Future Direction



- ❖ Continue Multivariate Analysis.
- ❖ Home-Language: First & Second Texts.
- ❖ Quality of Education Measures.
- ❖ Publish Research Findings !!!



**THANK YOU  
FOR  
YOUR ATTENTION**

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