



FACT SHEET

May 15, 2012

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**SCIP – Ogumaniha:**  
**Anthropometrics in children under five**

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Measurements of weight and height/length were collected for 667 children between 6 months and 5 years of age. Table 1 summarizes Zambézia child anthropometrics in reference to standardized measurements developed by the World Health Organization in 2006. WHO provides macros for statistical software packages that calculate the indicators of the attained growth standards (length/height-for-age, weight-for-age, weight-for-length, and weight-for-height). See [www.who.int/childgrowth](http://www.who.int/childgrowth) for more information.

Table 1: Child Anthropometrics

	N	% < -3 SD	(95% CI)	% < -2 SD	(95% CI)	Mean	SD
Weight-for-age							
6-60	667	8.4	(8.2, 8.6)	13.4	(13.2, 13.7)	-0.32	1.55
6-11	91	17.6	(16.8, 18.3)	17.9	(17.1, 18.6)	-0.13	1.78
12-23	104	6.6	(6.1, 7)	12.9	(12.2, 13.5)	-0.42	1.59
24-35	128	3.7	(3.4, 4)	6.8	(6.4, 7.2)	-0.05	1.57
36-47	215	6.7	(6.4, 7)	12.9	(12.4, 13.3)	-0.12	1.4
48-60	129	10.4	(9.9, 10.9)	17.2	(16.7, 17.8)	-0.87	1.43
Length/height-for-age							
6-60	667	19.9	(19.6, 20.2)	39.2	(38.8, 39.5)	-1.63	1.77
6-11	91	8	(7.5, 8.5)	27.1	(26.2, 27.9)	-1.28	1.41
12-23	104	16.1	(15.5, 16.8)	36.4	(35.5, 37.3)	-1.6	1.57
24-35	128	23.1	(22.4, 23.8)	39.3	(38.5, 40.1)	-1.39	2.08
36-47	215	15.7	(15.2, 16.2)	39.8	(39.2, 40.4)	-1.57	1.66
48-60	129	33.3	(32.6, 34)	47.6	(46.8, 48.3)	-2.13	1.87
Weight-for-length/height							
6-60	667	2.3	(2.2, 2.4)	7.4	(7.2, 7.6)	0.83	1.76
6-11	91	9.2	(8.6, 9.8)	14.1	(13.4, 14.7)	0.87	2.19
12-23	104	2.3	(2, 2.6)	6.2	(5.8, 6.7)	0.48	1.74
24-35	128	1	(0.8, 1.1)	5.9	(5.5, 6.3)	0.88	1.79
36-47	215	1.4	(1.3, 1.6)	6.8	(6.5, 7.2)	1.1	1.68
48-60	129	0.5	(0.4, 0.6)	5.9	(5.5, 6.3)	0.64	1.49

<sup>a</sup> Reference standards and analysis programs were developed by the World Health Organization in 2006. These programs perform weighted estimation, with each child being weighted by the inverse of its sampling probability.

Table 2: Weight-for-age deprivation (&lt;-2 SD)

	No (n=570)	Yes (n=97)
Household size <sup>a</sup> (n=667)	5.2 (4 – 7)	5 (4 – 6)
Children under 5 (n=667)	2 (2 – 2)	2 (2 – 2)
Age of respondent (n=574)	28 (23 – 34.6)	28 (21 – 35)
Marital Status <sup>b</sup> (n=667)		
Single	14.4% (8.7, 20.0)	6.2% (0.0, 13.1)
Married/Common Law	78.8% (73.0, 84.7)	87.8% (80.0, 95.6)
Widowed	3.8% (0.0, 8.4)	1.3% (0.0, 3.1)
Divorced/Separated	3.0% (1.1, 4.8)	4.7% (0.0, 9.5)
Length of residency (years) (n=660)	5 (3 – 11)	5 (3 – 7)
Urban/rural (n=667)		
Rural	79.4% (62.7, 96.2)	89.2% (75.2, 100.0)
Urban	20.6% (3.8, 37.3)	10.8% (0.0, 24.8)
Religion (n=639)		
Catholic	40.1% (29.3, 51.0)	43.8% (27.0, 60.5)
Protestant	14.9% (9.7, 20.1)	22.4% (7.4, 37.4)
Evangelical and Pentecostal	24.9% (16.2, 33.6)	14.2% (3.8, 24.7)
Other Christian <sup>c</sup>	3.9% (0.8, 7.0)	5.5% (0.0, 14.0)
Muslim	4.6% (2.0, 7.2)	7.1% (0.0, 16.6)
Non Christian Eastern	3.3% (0.7, 5.9)	0.2% (0.0, 0.6)
Other <sup>c</sup>	8.3% (3.5, 13.1)	6.8% (0.0, 15.9)
Education (n=667)	1.2 (0 – 4)	0 (0 – 3)
Primary language of household (n=665)		
Cinyanja	29.4% (14.8, 44.0)	10.2% (1.2, 19.3)
Cisena	6.3% (0.4, 12.2)	3.9% (0.0, 9.5)
Echuabo	14.6% (5.3, 23.8)	47.2% (28.7, 65.8)
Elomwe	40.3% (27.0, 53.6)	33.3% (15.5, 51.0)
Emakhuwa	0.5% (0.0, 1.5)	0.0% (0.0, 0.0)
Portuguese	8.9% (2.5, 15.4)	5.4% (0.0, 15.7)
Respondent understands Portuguese (n=667)	36.7% (26.6, 46.8)	36.2% (20.8, 51.7)
Distance of EA from health facility (km) <sup>a</sup> (n=664)	6.2 (3 – 10.3)	7.1 (3.9 – 11.6)
Monthly household income <sup>b</sup> (n=624)		
No income	26.0% (19.8, 32.3)	20.4% (8.0, 32.7)
Up to Mts 200	22.6% (15.8, 29.4)	26.3% (11.9, 40.7)
Mts 200–400	11.0% (6.6, 15.3)	27.7% (13.6, 41.7)
Mts 400–600	10.2% (5.7, 14.6)	10.3% (0.0, 21.3)
Mts 600–800	4.7% (1.9, 7.5)	0.5% (0.0, 1.4)
Mts 800–1000	7.3% (4.1, 10.4)	1.9% (0.0, 4.5)
Mts 1000–1500	8.4% (2.5, 14.2)	2.8% (0.0, 6.5)
Mts 1500–4000	7.7% (4.5, 10.9)	10.1% (0.0, 22.3)
More than Mts 4000	2.3% (0.0, 5.2)	0.1% (0.0, 0.2)
Household member has a farm (n=667)	90.7% (84.6, 96.8)	95.5% (87.3, 100.0)
Sometimes sell crops (n=618)	67.0% (56.7, 77.3)	53.5% (38.6, 68.5)
Ever sold livestock (n=667)	25.4% (19.0, 31.7)	24.5% (11.1, 38.0)
Household member owns bicycle (n=665)	47.2% (40.6, 53.8)	53.3% (38.8, 67.8)
Owens chicken(s) (n=667)	57.1% (46.3, 68.0)	48.2% (31.3, 65.2)
Household uses latrine (n=666)	44.6% (33.1, 56.0)	28.2% (13.1, 43.3)
Empowerment (score) (n=660)	50 (33.3 – 58.3)	41.7 (33.3 – 50)
Gender equality (score) (n=664)	78.5 (66.7 – 93)	78.2 (59.3 – 96.3)

<sup>a</sup> Continuous variables are reported as weighted estimates of median (interquartile range), with each observation being weighted by the inverse of the child sampling probability.

<sup>b</sup> Categorical variables are reported as weighted percentages, with each observation being weighted by the inverse of the child sampling probability. The 95% confidence intervals include precision estimates that incorporate the effects of stratification and clustering.

<sup>c</sup> ‘Other Christian’ includes LDS Mormon and Jehovah’s Witness. ‘Other’ includes Spiritual, Traditional Religions, and Agnostic or Atheist.

Table 3: Height/length-for-age deprivation (&lt;-2 SD)

	No (n=410)	Yes (n=257)
Household size <sup>a</sup> (n=667)	5.1 (4 – 7)	5 (4 – 7)
Children under 5 (n=667)	2 (1 – 2)	2 (2 – 2)
Age of respondent (n=574)	28 (23 – 34.2)	27 (22 – 35)
Marital Status <sup>b</sup> (n=667)		
Single	11.5% (6.0, 17.1)	16.0% (8.4, 23.6)
Married/Common Law	81.8% (75.9, 87.7)	77.3% (69.8, 84.8)
Widowed	2.9% (0.4, 5.4)	4.4% (0.0, 11.1)
Divorced/Separated	3.8% (1.2, 6.3)	2.3% (0.2, 4.3)
Length of residency (years) (n=660)	5 (3 – 10.4)	5 (3 – 10)
Urban/rural (n=667)		
Rural	81.0% (65.1, 97.0)	80.3% (62.5, 98.1)
Urban	19.0% (3.0, 34.9)	19.7% (1.9, 37.5)
Religion (n=639)		
Catholic	45.7% (35.1, 56.3)	33.1% (22.4, 43.7)
Protestant	15.7% (8.9, 22.5)	16.2% (10.0, 22.4)
Evangelical and Pentecostal	18.4% (10.4, 26.4)	31.0% (20.2, 41.7)
Other Christian <sup>c</sup>	3.3% (0.0, 6.7)	5.4% (1.5, 9.2)
Muslim	5.4% (2.0, 8.9)	4.2% (0.6, 7.7)
Non Christian Eastern	1.9% (0.0, 3.9)	4.3% (0.3, 8.2)
Other <sup>c</sup>	9.6% (3.5, 15.7)	5.9% (1.5, 10.4)
Education (n=667)	1.1 (0 – 4)	1 (0 – 3.8)
Primary language of household (n=665)		
Cinyanja	24.0% (10.0, 38.0)	31.2% (15.1, 47.3)
Cisena	8.5% (0.6, 16.4)	2.1% (0.0, 5.2)
Echuabo	15.8% (5.3, 26.4)	23.8% (10.7, 36.9)
Elomwe	40.5% (26.3, 54.7)	37.6% (23.7, 51.4)
Emakhuwa	0.7% (0.0, 2.1)	0.0% (0.0, 0.0)
Portuguese	10.5% (1.7, 19.2)	5.4% (0.6, 10.2)
Respondent understands Portuguese (n=667)	40.1% (28.3, 51.8)	31.3% (18.8, 43.8)
Distance of EA from health facility (km) <sup>a</sup> (n=664)	6.2 (3 – 9.6)	6.9 (3 – 11.5)
Monthly household income <sup>b</sup> (n=624)		
No income	24.1% (16.9, 31.2)	27.1% (19.1, 35.2)
Up to Mts 200	26.5% (18.4, 34.5)	17.9% (9.6, 26.2)
Mts 200–400	12.6% (7.9, 17.2)	14.0% (6.9, 21.2)
Mts 400–600	10.3% (5.5, 15.2)	9.9% (3.3, 16.5)
Mts 600–800	4.6% (1.0, 8.1)	3.4% (1.1, 5.8)
Mts 800–1000	4.8% (1.7, 8.0)	9.2% (3.7, 14.8)
Mts 1000–1500	5.3% (3.0, 7.6)	11.2% (0.3, 22.1)
Mts 1500–4000	8.6% (4.1, 13.2)	7.1% (2.2, 11.9)
More than Mts 4000	3.2% (0.0, 7.4)	0.0% (0.0, 0.1)
Household member has a farm (n=667)	92.7% (87.1, 98.2)	89.3% (81.8, 96.8)
Sometimes sell crops (n=618)	63.8% (52.7, 75.0)	67.0% (55.5, 78.5)
Ever sold livestock (n=667)	23.3% (15.9, 30.7)	28.3% (18.8, 37.8)
Household member owns bicycle (n=665)	43.5% (36.0, 51.0)	55.1% (45.2, 65.1)
Owns chicken(s) (n=667)	58.6% (48.6, 68.7)	51.7% (37.2, 66.2)
Household uses latrine (n=666)	42.5% (31.0, 54.0)	42.2% (27.3, 57.1)
Empowerment (score) (n=660)	50 (33.3 – 58.3)	50 (33.3 – 58.3)
Gender equality (score) (n=664)	80 (66.1 – 93.3)	76.7 (63.8 – 90.8)

<sup>a</sup> Continuous variables are reported as weighted estimates of median (interquartile range), with each observation being weighted by the inverse of the child sampling probability.

<sup>b</sup> Categorical variables are reported as weighted percentages, with each observation being weighted by the inverse of the child sampling probability. The 95% confidence intervals include precision estimates that incorporate the effects of stratification and clustering.

<sup>c</sup> ‘Other Christian’ includes LDS Mormon and Jehovah’s Witness. ‘Other’ includes Spiritual, Traditional Religions, and Agnostic or Atheist.

Table 4: Weight-for-height/length deprivation (&lt;-2 SD)

	No (n=617)	Yes (n=50)
Household size <sup>a</sup> (n=667)	5 (4 – 7)	5 (4 – 7)
Children under 5 (n=667)	2 (2 – 2)	2 (1.8 – 2)
Age of respondent (n=574)	27 (23 – 34)	32 (25 – 37)
Marital Status <sup>b</sup> (n=667)		
Single	13.7% (8.2, 19.1)	8.5% (0.0, 20.4)
Married/Common Law	79.9% (74.4, 85.3)	82.1% (69.2, 95.1)
Widowed	3.7% (0.0, 7.9)	0.9% (0.0, 2.6)
Divorced/Separated	2.8% (1.0, 4.6)	8.5% (0.0, 17.5)
Length of residency (years) (n=660)	5 (3 – 10)	4 (3 – 10.2)
Urban/rural (n=667)		
Rural	79.5% (62.6, 96.4)	96.1% (88.4, 100.0)
Urban	20.5% (3.6, 37.4)	3.9% (0.0, 11.6)
Religion (n=639)		
Catholic	39.7% (30.0, 49.4)	52.8% (33.1, 72.4)
Protestant	16.4% (11.3, 21.4)	10.1% (0.0, 21.0)
Evangelical and Pentecostal	24.5% (16.1, 32.9)	10.6% (0.6, 20.5)
Other Christian <sup>c</sup>	4.1% (1.2, 7.0)	4.2% (0.0, 12.2)
Muslim	4.3% (1.9, 6.7)	12.9% (0.0, 29.9)
Non Christian Eastern	3.1% (0.7, 5.5)	0.0% (0.0, 0.0)
Other <sup>c</sup>	8.0% (3.5, 12.5)	9.5% (0.0, 25.4)
Education (n=667)	1 (0 – 4)	1 (0 – 3)
Primary language of household (n=665)		
Cinyanja	28.2% (14.0, 42.4)	9.8% (0.0, 21.3)
Cisena	5.9% (0.4, 11.4)	6.2% (0.0, 16.6)
Echuabo	17.2% (6.6, 27.9)	40.6% (16.8, 64.5)
Elomwe	39.0% (25.7, 52.3)	43.3% (18.7, 67.9)
Emakhuwa	0.5% (0.0, 1.4)	0.0% (0.0, 0.0)
Portuguese	9.1% (2.2, 16.0)	0.0% (0.0, 0.0)
Respondent understands Portuguese (n=667)	35.6% (25.6, 45.7)	49.2% (29.0, 69.5)
Distance of EA from health facility (km) <sup>a</sup> (n=664)	6.6 (3 – 10.3)	6.3 (3.3 – 12.1)
Monthly household income <sup>b</sup> (n=624)		
No income	25.7% (19.7, 31.8)	19.9% (4.7, 35.1)
Up to Mts 200	23.3% (16.5, 30.0)	20.8% (5.4, 36.2)
Mts 200–400	11.1% (6.5, 15.7)	37.2% (19.7, 54.6)
Mts 400–600	9.7% (5.5, 13.8)	16.4% (2.1, 30.6)
Mts 600–800	4.5% (1.8, 7.2)	0.0% (0.0, 0.0)
Mts 800–1000	7.0% (4.0, 10.1)	1.1% (0.0, 3.4)
Mts 1000–1500	7.9% (2.4, 13.4)	4.5% (0.0, 10.3)
Mts 1500–4000	8.7% (4.8, 12.6)	0.2% (0.0, 0.5)
More than Mts 4000	2.1% (0.0, 4.9)	0.0% (0.0, 0.0)
Household member has a farm (n=667)	91.0% (85.3, 96.7)	95.9% (88.2, 100.0)
Sometimes sell crops (n=618)	66.0% (55.8, 76.2)	54.1% (34.3, 73.9)
Ever sold livestock (n=667)	25.5% (19.1, 31.9)	21.9% (8.0, 35.9)
Household member owns bicycle (n=665)	48.4% (42.0, 54.8)	43.3% (22.8, 63.8)
Owens chicken(s) (n=667)	56.1% (45.2, 66.9)	54.2% (34.6, 73.8)
Household uses latrine (n=666)	43.1% (31.2, 55.1)	32.6% (14.0, 51.1)
Empowerment (score) (n=660)	50 (33.3 – 58.3)	41.7 (33.3 – 50)
Gender equality (score) (n=664)	77.8 (63.3 – 92.6)	85.9 (73.3 – 100)

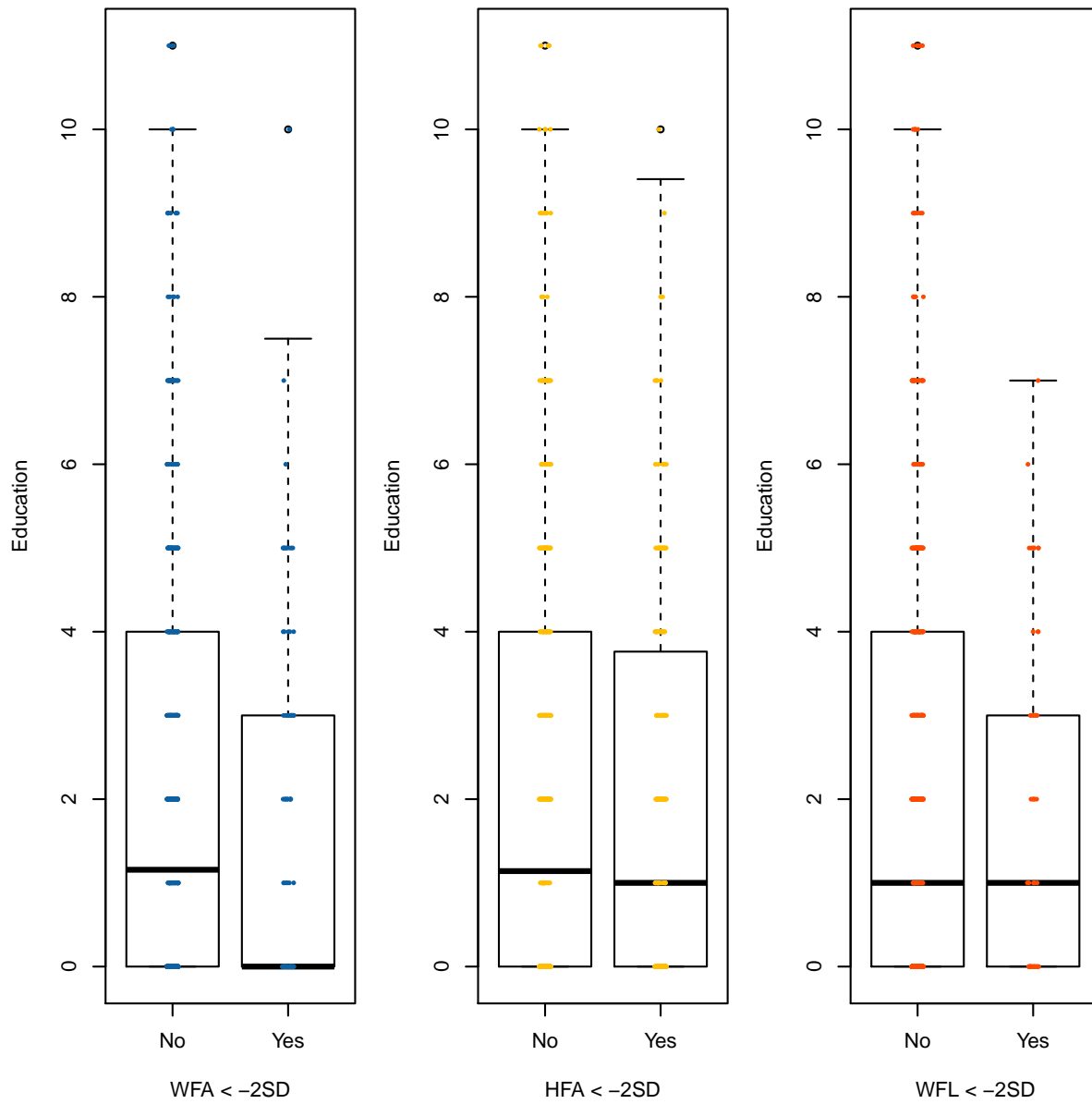
<sup>a</sup> Continuous variables are reported as weighted estimates of median (interquartile range), with each observation being weighted by the inverse of the child sampling probability.

<sup>b</sup> Categorical variables are reported as weighted percentages, with each observation being weighted by the inverse of the child sampling probability. The 95% confidence intervals include precision estimates that incorporate the effects of stratification and clustering.

<sup>c</sup> ‘Other Christian’ includes LDS Mormon and Jehovah’s Witness. ‘Other’ includes Spiritual, Traditional Religions, and Agnostic or Atheist.

<sup>d</sup> Asked of children under 5 years of age.

Figure 1: Boxplots of Education for Key Health Outcomes



The edges of the box are the first and third quartiles, with the median marked by the center line. Whiskers extend from the box  $1.5 \times \text{IQR}$  (interquartile range; length of the box). Data outlying the whiskers are marked with points. Actual values are overlaid to demonstrate the whole distribution.

Figure 2: Barplots of Monthly Income for Key Health Outcomes

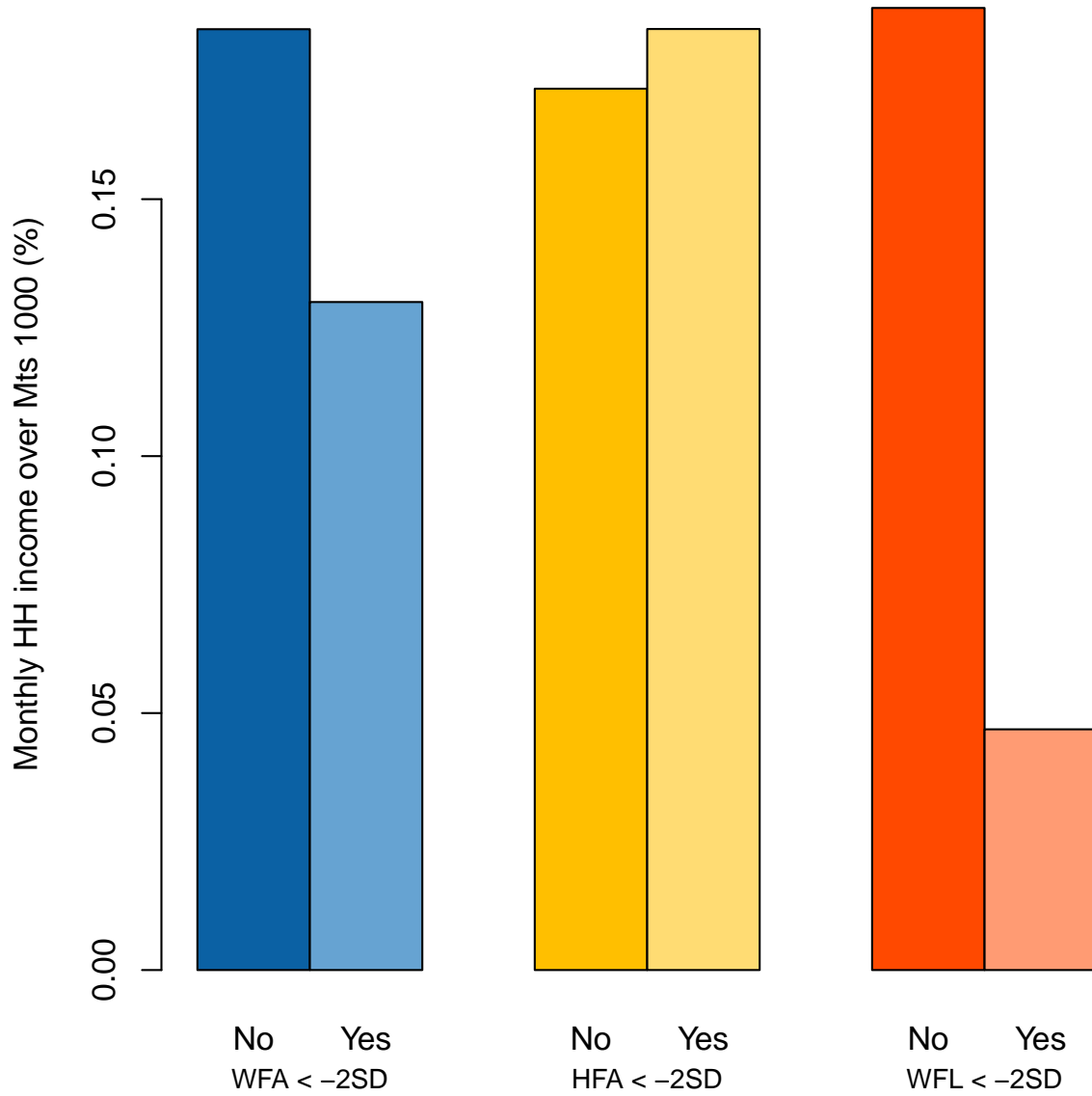


Figure 3: Barplots of Portuguese Understanding for Key Health Outcomes

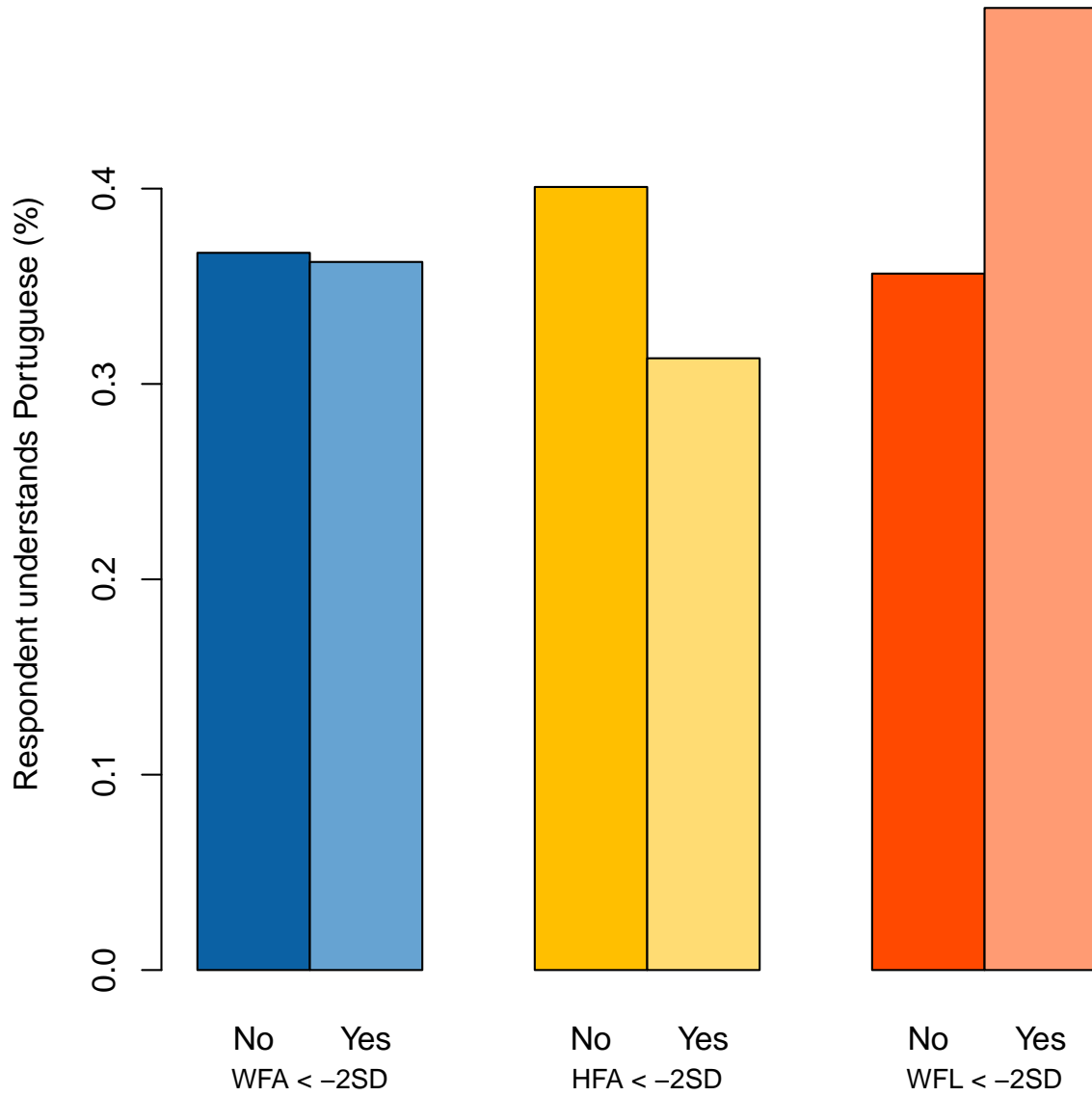
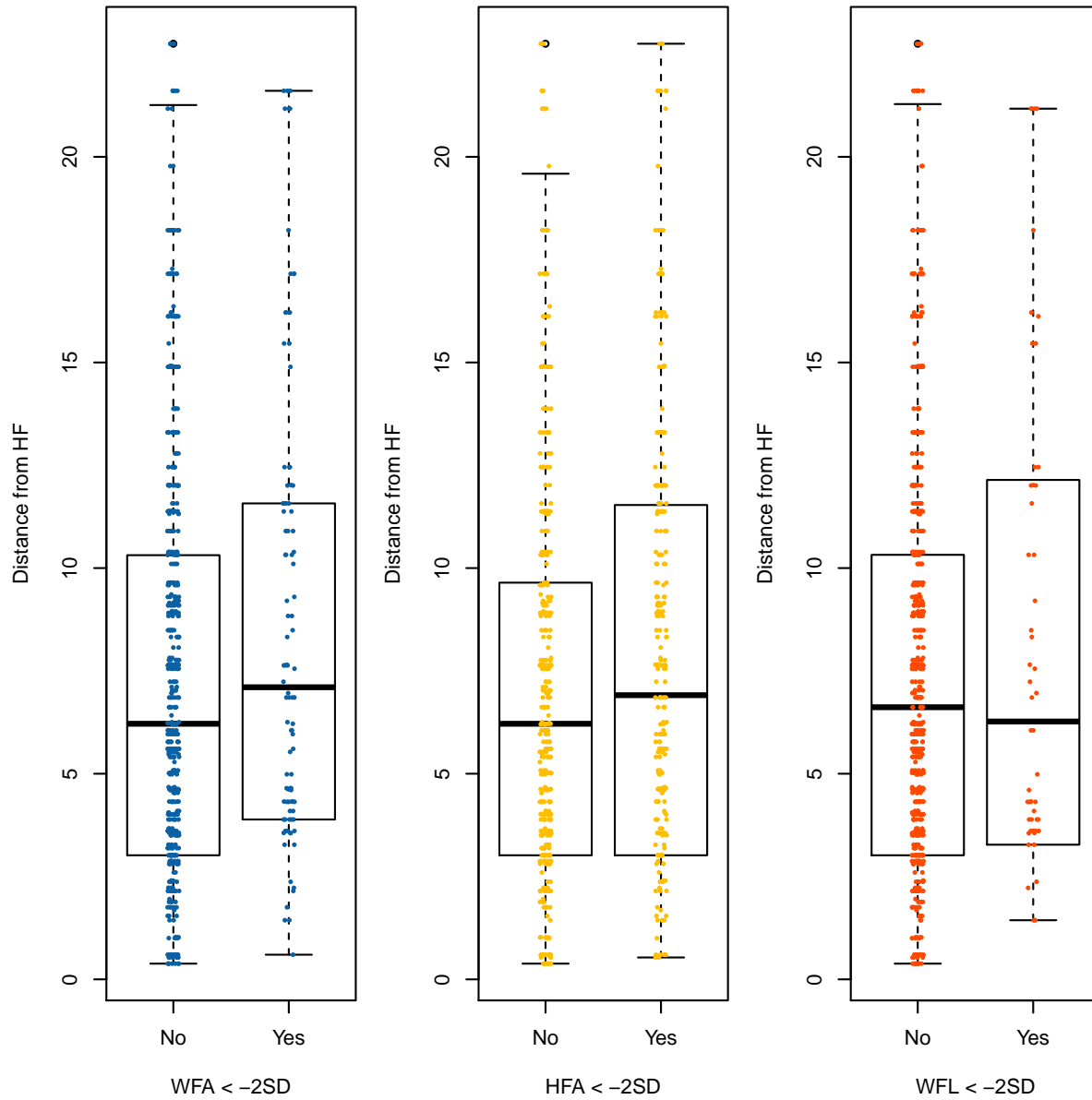




Figure 4: Boxplots for Distance of EA from health facility (km) for Key Health Outcomes



The edges of the box are the first and third quartiles, with the median marked by the center line. Whiskers extend from the box  $1.5 \times \text{IQR}$  (interquartile range; length of the box). Data outlying the whiskers are marked with points. Actual values are overlaid to demonstrate the whole distribution.