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Association between demand–control model components and blood pressure in the ELSA-Brasil study: exploring heterogeneity using quantile regression analyses [1]

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1. *Supplementary tables*
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Supplementary table S1. Sample quantiles of the blood pressure distribution for the total study population and by use of antihypertensives. ELSA-Brasil, 2008-2010

Quantiles	Total study population (N=11647)		Non-users of antihypertensives (N=9057)		Users of antihypertensives (N=2590)	
	SBP (mmHg)	DBP (mmHg)	SBP (mmHg)	DBP (mmHg)	SBP (mmHg)	DBP (mmHg)
Quantile 5	97.5	60.5	96.5	59.5	103.5	65.0
Quantile 10	101.0	63.5	100.0	62.5	108.0	68.5
Quantile 15	103.5	65.5	102.5	64.5	111.0	70.5
Quantile 20	106.0	67.0	104.5	66.0	114.0	72.5
Quantile 25	108.0	68.5	106.5	67.5	116.0	73.5
Quantile 30	110.0	70.0	108.0	69.0	118.0	75.0
Quantile 35	112.0	71.5	110.0	70.0	120.0	76.5
Quantile 40	113.5	73.0	112.0	71.5	122.0	78.0
Quantile 45	115.5	74.0	113.5	72.5	123.5	79.5
Quantile 50	117.5	75.5	115.5	74.0	125.5	81.0
Quantile 55	119.5	76.5	117.0	75.0	127.5	82.0
Quantile 60	121.5	78.0	119.0	76.5	130.0	83.5
Quantile 65	123.5	79.5	121.0	78.0	132.0	84.5
Quantile 70	126.0	81.5	123.0	79.5	135.0	86.0

Quantile 75	128.5	83.0	125.5	81.0	138.0	88.0
Quantile 80	131.5	85.0	128.5	83.0	141.0	90.0
Quantile 85	135.5	87.5	132.0	85.5	145.0	92.0
Quantile 90	140.5	90.5	136.5	88.5	151.0	95.0
Quantile 95	149.5	95.5	144.0	93.0	160.0	99.5

DBP, diastolic blood pressure; SBP, systolic blood pressure.

Supplementary table S2. Coefficients (95% CI)[a] for the association between the demand-control model components and blood pressure in the quantile regression models for the total study population. ELSA-Brasil, 2008-2010 (N=11647)

Models	SBP (mmHg)						DBP (mmHg)					
	High Job Demands[a]		High Skill Discretion[b]		High Decision Authority[c]		High Job Demands[a]		High Skill Discretion[b]		High Decision Authority[c]	
	Coef.	95% CI	Coef.	95% CI	Coef.	95% CI	Coef.	95% CI	Coef.	95% CI	Coef.	95% CI
Quantile 5	0.38	-0.28–1.04	0.73	-0.02–1.47	0.41	-0.29–1.12	-0.13	-0.64–0.38	0.46	-0.14–1.05	-0.08	-0.63–0.47
Quantile 10	0.58	0.00–1.17	**1.01**	**0.31–1.71**	0.26	-0.36–0.88	0.18	-0.27–0.64	0.26	-0.26–0.77	-0.16	-0.67–0.35
Quantile 15	0.30	-0.21–0.81	0.45	-0.15–1.06	0.27	-0.29–0.83	0.06	-0.38–0.49	0.38	-0.11–0.87	-0.13	-0.57–0.30
Quantile 20	0.27	-0.26–0.81	0.46	-0.14–1.05	0.39	-0.17–0.94	0.08	-0.39–0.56	0.52	0.00–1.03	0.07	-0.42–0.56
Quantile 25	0.19	-0.36–0.73	0.30	-0.30–0.90	0.30	-0.28–0.87	0.08	-0.36–0.52	0.03	-0.48–0.54	0.10	-0.37–0.58
Quantile 30	0.08	-0.49–0.64	0.20	-0.45–0.86	0.41	-0.17–0.99	0.10	-0.35–0.54	0.05	-0.43–0.53	0.02	-0.44–0.48
Quantile 35	-0.04	-0.61–0.52	0.16	-0.48–0.80	0.54	-0.07–1.14	-0.12	-0.56–0.31	-0.05	-0.53–0.43	0.10	-0.36–0.57
Quantile 40	0.06	-0.54–0.66	0.21	-0.46–0.88	0.60	-0.04–1.23	-0.07	-0.50–0.36	0.08	-0.39–0.54	-0.09	-0.56–0.37
Quantile 45	0.07	-0.53–0.66	0.21	-0.44–0.85	0.48	-0.14–1.10	-0.03	-0.50–0.43	0.13	-0.38–0.64	-0.05	-0.53–0.43
Quantile 50	0.12	-0.51–0.74	0.37	-0.33–1.06	0.42	-0.25–1.09	-0.16	-0.59–0.27	0.12	-0.35–0.60	-0.04	-0.48–0.41
Quantile 55	-0.04	-0.70–0.61	0.59	-0.13–1.31	0.25	-0.45–0.95	-0.23	-0.66–0.21	0.11	-0.38–0.60	0.00	-0.46–0.46
Quantile 60	-0.39	-1.02–0.24	0.75	0.00–1.49	0.18	-0.51–0.87	-0.19	-0.65–0.27	0.04	-0.47–0.55	-0.02	-0.50–0.47
Quantile 65	-0.50	-1.19–0.18	0.50	-0.28–1.28	0.11	-0.61–0.84	-0.30	-0.80–0.21	0.04	-0.52–0.59	0.03	-0.50–0.55
Quantile 70	-0.37	-1.12–0.38	0.81	-0.03–1.65	0.30	-0.50–1.10	-0.24	-0.78–0.29	0.25	-0.36–0.85	0.10	-0.47–0.68
Quantile 75	-0.01	-0.74–0.72	0.38	-0.46–1.21	0.21	-0.58–0.99	-0.11	-0.64–0.43	0.24	-0.35–0.82	0.19	-0.37–0.76
Quantile 80	0.03	-0.80–0.86	-0.01	-0.97–0.96	-0.03	-0.92–0.87	-0.14	-0.74–0.46	0.45	-0.19–1.09	0.36	-0.26–0.98
Quantile 85	-0.29	-1.29–0.71	0.07	-1.01–1.15	-0.07	-1.11–0.97	-0.19	-0.86–0.47	0.56	-0.17–1.30	0.58	-0.11–1.27
Quantile 90	-0.14	-1.29–1.02	0.34	-1.02–1.70	0.19	-1.02–1.41	-0.31	-1.01–0.39	0.52	-0.25–1.30	0.17	-0.58–0.93
Quantile 95	-1.13	-2.51–0.25	0.03	-1.25–1.31	0.20	-1.47–1.88	-0.90	-1.82–0.02	0.12	-1.03–1.26	0.19	-0.93–1.32

CI, confidence interval; Coef, coefficient; DBP, diastolic blood pressure; SBP, systolic blood pressure

[a]The coefficients are adjusted by gender, age, recruitment site, race/color, schooling, mother's schooling and weekly hours worked;

[b]Reference category: low job demands;

[c]Reference category: low skill discretion;

[d]Reference category: low decision authority.

Supplementary table S3. Coefficients (95% CI)[a,b] for the association between decision authority and blood pressure in the quantile regression models, by use of antihypertensives. ELSA-Brasil, 2008-2010

Models	*Non-users of antihypertensives (N=9057)*				*Users of antihypertensives (N=2590)*			
	SBP (mmHg)		**DBP (mmHg)**		**SBP (mmHg)**		**DBP (mmHg)**	
	Coef.	**95% CI**	**Coef.**	**95% CI**	**Coef.**	**95% CI**	**Coef.**	**95% CI**
Quantile 5	0.47	-0.23–1.16	-0.09	-0.56–0.37	-0.16	-1.54–1.22	**1.85**	**0.48–3.22**
Quantile 10	0.41	-0.26–1.08	-0.15	-0.70–0.40	0.15	-1.15–1.44	**1.32**	**0.28–2.36**
Quantile 15	0.50	-0.07–1.08	-0.33	-0.81–0.15	-0.04	-1.33–1.25	0.81	-0.18–1.81
Quantile 20	0.35	-0.24–0.94	-0.12	-0.60–0.36	0.68	-0.67–2.02	0.45	-0.73–1.64
Quantile 25	0.39	-0.21–0.98	0.00	-0.52–0.53	0.03	-1.41–1.48	-0.01	-1.14–1.12
Quantile 30	0.41	-0.17–1.00	0.10	-0.38–0.58	-0.32	-1.83–1.20	-0.23	-1.18–0.71
Quantile 35	**0.64**	**0.02–1.25**	0.04	-0.43–0.52	-0.62	-2.15–0.92	-0.44	-1.37–0.49
Quantile 40	**0.65**	**0.02–1.28**	0.15	-0.35–0.66	-0.79	-2.28–0.71	-0.42	-1.46–0.62
Quantile 45	**0.86**	**0.18–1.54**	0.08	-0.45–0.60	-0.92	-2.36–0.51	-0.29	-1.30–0.72
Quantile 50	**0.82**	**0.11–1.52**	0.16	-0.35–0.67	-1.00	-2.43–0.43	-0.01	-1.02–1.00
Quantile 55	**0.94**	**0.22–1.66**	0.23	-0.28–0.74	-1.18	-2.68–0.31	-0.12	-1.14–0.91
Quantile 60	**0.76**	**0.01–1.53**	0.33	-0.18–0.85	-1.22	-2.68–0.25	-0.17	-1.18–0.84
Quantile 65	0.68	-0.07–1.43	0.20	-0.34–0.74	-1.19	-2.80–0.42	0.18	-0.80–1.15
Quantile 70	0.71	-0.09–1.52	0.20	-0.38–0.79	-1.22	-2.82–0.38	0.56	-0.37–1.48
Quantile 75	0.71	-0.19–1.61	0.37	-0.27–1.01	-0.39	-2.31–1.53	0.79	-0.32–1.91
Quantile 80	0.63	-0.15–1.42	0.44	-0.23–1.10	0.27	-1.96–2.49	0.13	-1.17–1.43
Quantile 85	0.65	-0.46–1.75	0.30	-0.36–0.96	0.36	-1.45–2.17	0.43	-0.60–1.46
Quantile 90	0.69	-0.56–1.94	0.32	-0.72–1.36	0.91	-1.42–3.23	0.71	-0.68–2.10
Quantile 95	-0.06	-1.52–1.41	0.47	-0.68–1.62	1.51	-1.90–4.92	0.14	-1.87–2.15

CI, confidence interval; Coef, coefficient; DBP, diastolic blood pressure; SBP, systolic blood pressure

[a]The coefficients are adjusted by gender, age, recruitment site, race/color, schooling, mother's schooling and weekly hours worked;

[b]Reference category: low decision authority.