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QALY Brasil

Does the socioeconomic status influence HRQOL preferences?
Results from QALYBrasil

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EQ-5D

Inequality

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FEATURE STORY

Most Brazilian Soccer Players Earn Less Than $650 per Month

June 7, 2014

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That minority –soccer players who earn more than 20 monthly minimum wages (US$ 6,380) – accounts for just 2% of the nearly 31,000 players registered with the Brazilian Soccer Confederation in 2012. Close to 25,000 players (82%) have a monthly income below two monthly minimum wages (US$ 638)

A boy plays soccer in a low-income neighborhood of Salvador, Brasil.

Mariana Ceratti / World Bank

The country's social inequality is reflected in the fact that eight of every 10 soccer players live on less than US$ 650 a month

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The Socioeconomic Differences in Brazil

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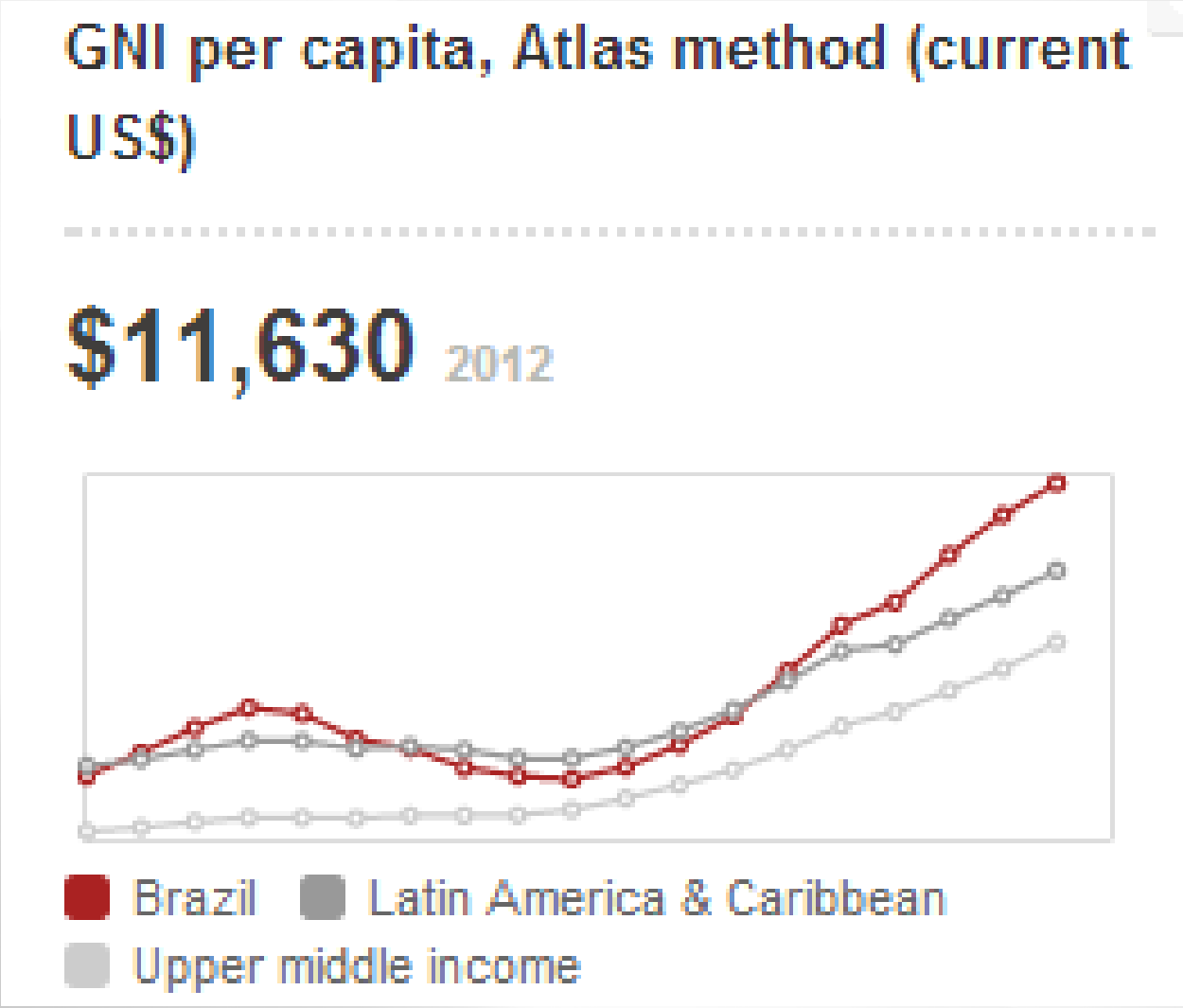

Fonte: FGV e IBGE

The Socioeconomic Differences in Brazil

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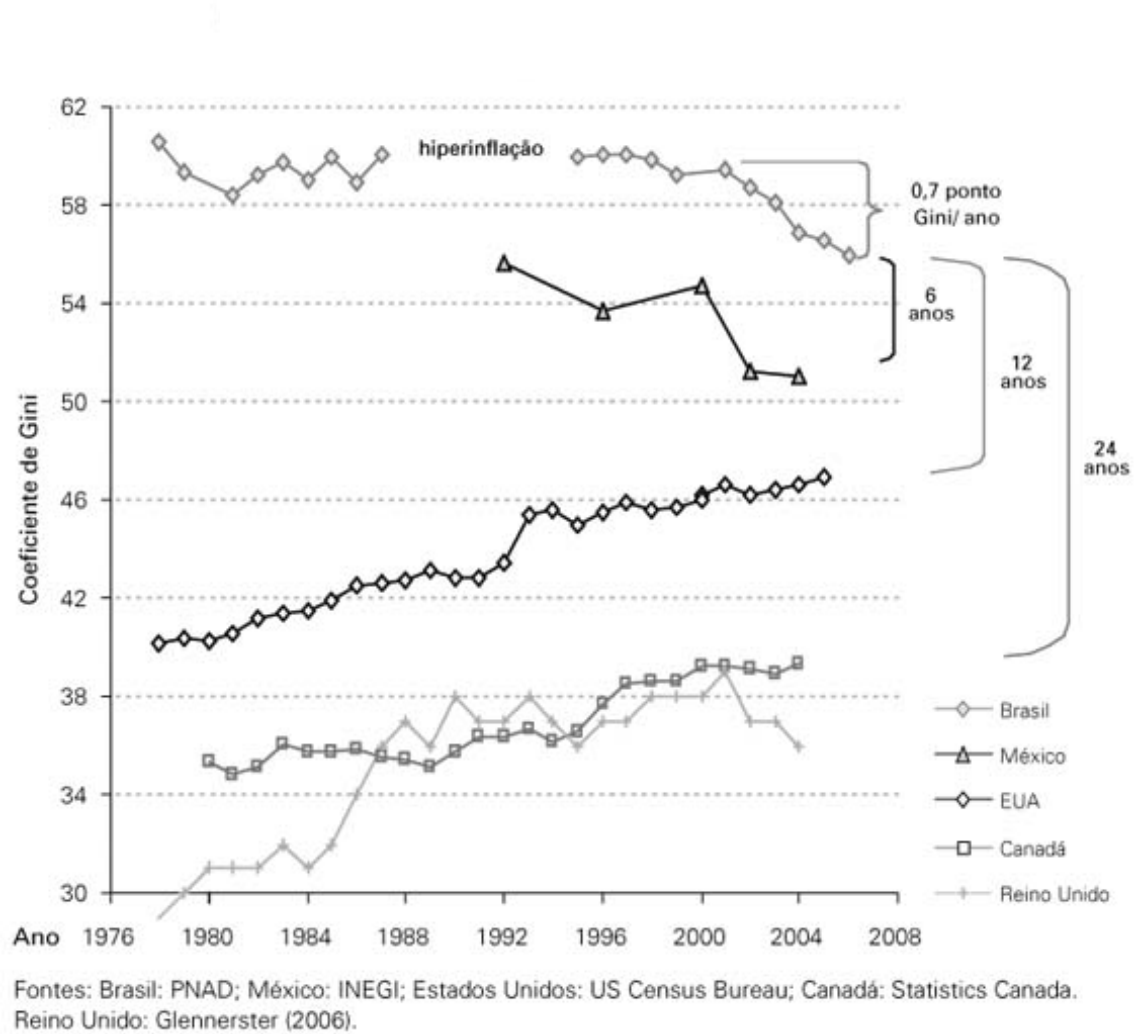
Social Mobility in Brazil from 2004 to 2010

- 32 million people moved to middle class
- 19.3 million moved out of absolute poverty
- 94.9 million people in the middle class, that corresponds to 50.5% of Brazilian population and to 46.24% of purchasing power.

Strategic Secrectary from Brazilian Republic Presidence (*Neri*)

Inequality - GINI



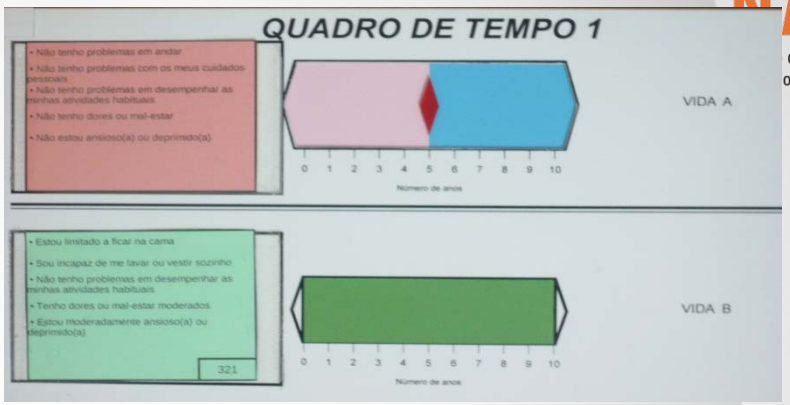
2012 - 0,530
2011 - 0,532
2009 - 0,543
2008 - 0,546
2007 - 0,556

Resource:IPEA

Soares S. Rev. Econ. Polit. 2010

Interview

- EQ-5D-3L descriptive system
- Time trade-off
- Individual characteristics
  - ✓ Ownership of goods
  - ✓ Marital status
  - ✓ Educational level
  - ✓ Religion
  - ✓ Afterlife belief



Criteria for socioeconomic evaluation

http://www.abep.org/new/criterioBrasil.aspx

Ownership	Amount of items				
	0	1	2	3	4 ou +
Color Tv	0	1	2	3	4
Radio	0	1	2	3	4
Bathroom	0	4	5	6	7
Car	0	4	7	9	9
Housemaid	0	3	4	4	4
Washer	0	2	2	2	2
VCR/DVD	0	2	2	2	2
Refrigerator	0	4	4	4	4
Freezer	0	2	2	2	2

+

Head of household education level	Score
Iliterate/uncompleted elementary education	0
Elementary education	1
Middle school	2
High school	4
College	8

Classes	Score
A1	42/46
A2	35/41
B1	29/34
B2	23/28
C1	18/22
C2	14/17
D	8/13
E	0/7

	Gross Household Monthly Income	n
	US$	%
A	4,988	5,15
B	1983	38,36
C	1216	50,71
D/E	376	5,78

Method

- Univariate analysis
  - Descriptive system
  - Time trade-off tool for valuation
- Robust linear regression

Minimally Important Difference

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- The smallest change in a treatment outcome that a patient would identify as important throughout the time
- For EQ5D = 0.07

Walters SJ, Brazier JE. Qual Life Res. 2005 Aug;14(6):1523-32

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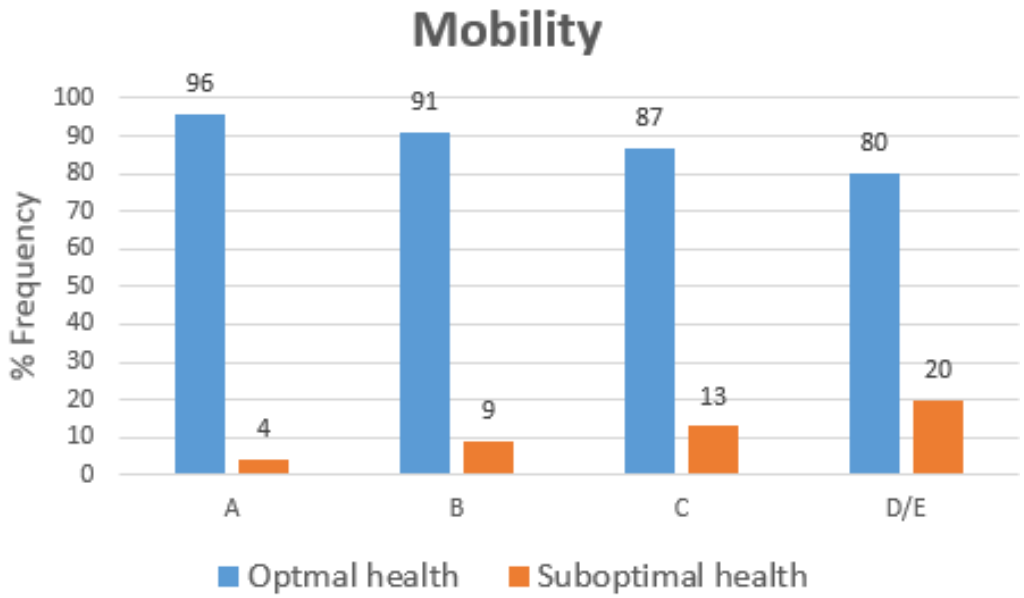
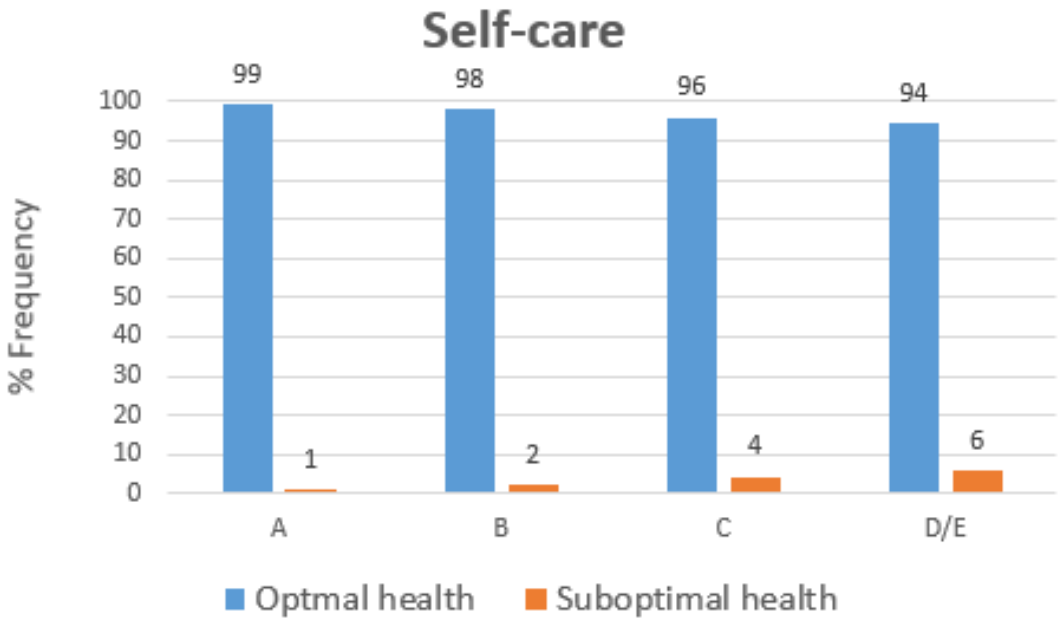
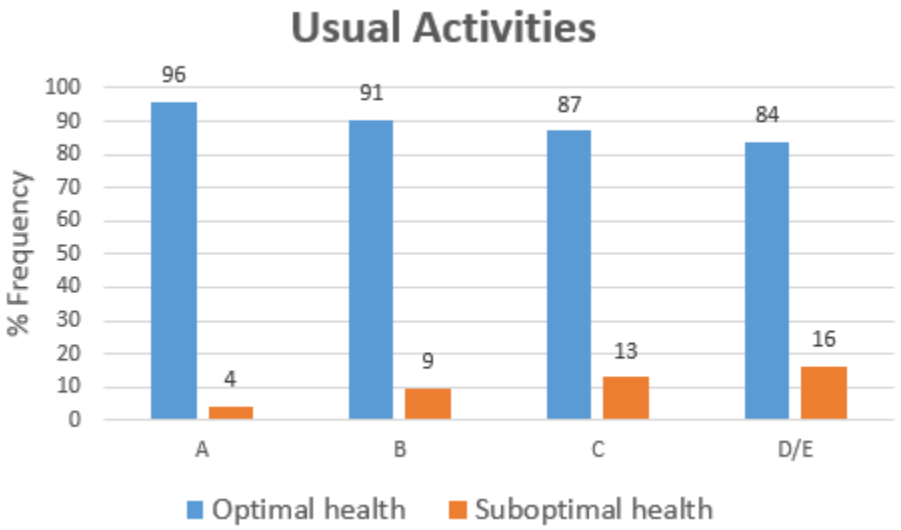
Results

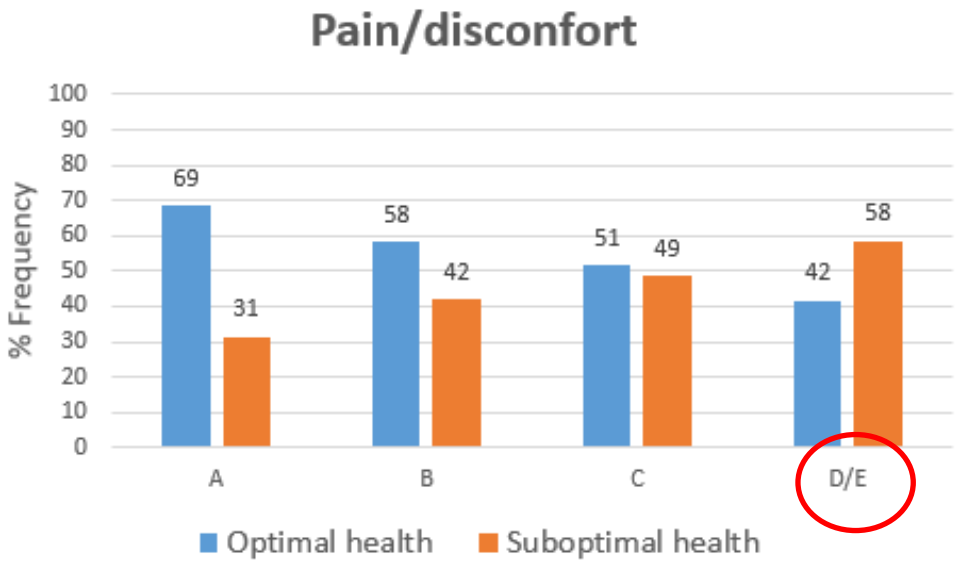
Population norms

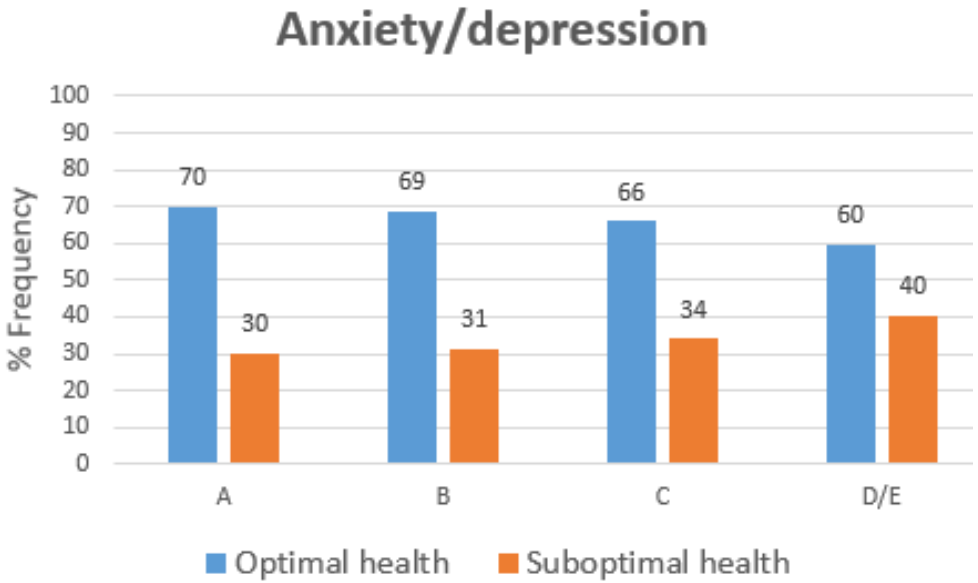
HRQoL frequency in each dynamic stratified SES






Usual Activities
% Frequency
100
90
80
70
60
50
40
30
20
10
0
96
4
91
9
87
13
84
16
A
B
C
D/E
Optimal health
Suboptimal health


Pain/disconfort
% Frequency
100
90
80
70
60
50
40
30
20
10
0
69
31
58
42
51
49
42
58
A
B
C
D/E
Optimal health
Suboptimal health


Anxiety/depression
% Frequency
100
90
80
70
60
50
40
30
20
10
0
70
30
69
31
66
34
60
40
A
B
C
D/E
Optimal health
Suboptimal health

Predictors of HRQOL

Model			
Variables	Coeficient	SD	p
Intercept	0.9862	0.0079	<0.001
SES B	-0.0325	0.0065	<0.001
SES C	-0.0587	0.0064	<0.001
SES D/E	-0.0843	0.0084	<0.001
Female gender	0.0432	0.0028	<0.001
Caregiver	-0.0266	0.0028	<0.001
Age	-0.0021	0.0001	<0.001
Widowhood	-0.0203	0.008594	<0.02
After-life	-0.0057	0.0028	<0.04

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Valuation (utility) Data

Predictors of Utility Valuation

	Coeficient	SD	p
(Intercept)	0.8122	0.0137	<0.001
Mobility (level 2)	-0,1217	0.0044	<0.001
Mobility (level 3)	-0.4073	0.0046	<0.001
Self-care (level)2	-0.1269	0.0044	<0.001
Self-care (level)3	-0.2394	0.0046	<0.001
Usual Activities (level 2)	-0.1116	0.0044	<0.001
Usual Activities (level 3)	-0.2055	0.0045	<0,001
Pain/disconfort (level 2)	-0.0828	0.0044	<0.001
Pain/disconfort (level 3)	-0.1909	0.0045	<0,001
Anxiety/depression (level 2)	-0.0751	0.0044	<0.001
Anxiety/depression (level 3)	-0.1189	0.0045	<0,001
Male	-0.0072	0.0033	<0.05
Age	0.0024	0.0001	<0.001
Divorced	-0.0192	0.0063	<0.01
Single	-0.0140	0.0039	<0.001
Widowhood	-0.0462	0.0101	<0.001
Afterlife (yes, maybe)	-0.0187	0.0034	<0.001
Belief in god (yes)	0.0915	0.0117	<0.001
SES D and E	0.0148	0.0071	<0.05

Does the Socioeconomic Status Influence HRQOL Preferences?

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- There are differences on self-reported HRQOL, but there are no differences on valuation

- This evidence suggest that despite the socioeconomic inequalities intrinsic to Brazilian population the QALY estimates obtained in this study may be applied to make decisions that affect all the population

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Thank you

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