

A Perceived Human Development Index (PHDI) *4

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OBJECTIVES

**CONSTRUCT A PERCEIVED HUMAN
DEVELOPMENT INDEX (PHDI)**

**CORRELATION BETWEEN INCOME, AGE AND
PHDI COMPONENTS**

**LIFE SATISFACTION AND THE WEIGHTS OF
THE HUMAN DEVELOPMENT INDEX**

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**CONSTRUCT A PERCEIVED HUMAN
DEVELOPMENT INDEX (PHDI)**

The Four Qualities of Life

| | Outer Quality | Inner Quality |
|--------------|---------------------------|------------------------|
| Life Chances | Livability of environment | Life-ability of person |
| Life Results | Utility of life | Satisfaction with life |

Source: Veehoven (2000)

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Mixing all Ingredients - Principal Components American Countries 2007

| | HEALTH INN | INCOME DEPRIV INN | INCOME / WORK OUT | WORK INN | HEALTH INN | HEALTH/ EDUC ACCESS OUT | HEALTH/E DUC SATSIFAC TION OUT | INCOME DEPR /WORK POLICY SATSIFAC TION OUT | HEALTH/W ORK OUT |
|--|---------------|-------------------------|-------------------------|-------------|---------------|----------------------------------|---|---|---------------------|
| | Factor1 | Factor2 | Factor3 | Factor4 | Factor5 | Factor6 | Factor7 | Factor8 | Factor9 |
| Feelings about your household's income - Living comfortably or Getting by on present income | 24 | -48 * | 29 | 15 | -4 | 5 | 2 | -3 | 5 |
| Do you believe the current economic conditions in (response in Sa) are good or not | -2 | -2 | 70 * | -2 | 5 | 18 | 2 | 22 | 12 |
| Right now do you think that economic conditions in (response in Sa) as a whole are getting better or the same? | -2 | -2 | 76 * | -2 | 6 | 7 | 2 | 14 | 8 |
| Are you satisfied or dissatisfied with efforts to deal with the poor? | 0 | 0 | 14 | 0 | -2 | 20 | 14 | 83 * | -6 |
| Right now do you feel your standard of living is getting better or the same? | 24 | -22 | 52 * | 8 | -3 | -9 | 9 | 0 | -8 |
| Have there been times in the past twelve months when you did not have enough money to provide adequate shelter or housing for you and your family? | 3 | 72 * | 4 | 2 | -6 | -2 | -3 | 1 | 9 |
| Have there been times in the past twelve months when you or your family have gone hungry? | -10 | 72 * | -8 | -3 | -6 | 6 | -1 | -2 | -11 |
| Have there been times in the past twelve months when you did not have enough money to buy food that you or your family needed? | -10 | 82 * | -11 | -3 | -1 | 2 | 0 | -1 | -3 |
| MOBILITY (have no problems walking around) | 36 | -3 | 3 | 5 | 70 * | -3 | 0 | -2 | -4 |
| SELF CARE (have no problems with self-care) | 10 | -4 | 0 | 1 | 80 * | 0 | 0 | -2 | 2 |
| USUAL ACTIVITIES (have no problems with performing my us - work study housework family or leisure activities) | 37 | -4 | 1 | 5 | 73 * | -2 | 2 | 1 | -3 |
| PAIN/DISCOMFORT(have no pain or discomfort) | 68 * | -5 | 5 | 1 | 28 | 4 | 2 | -8 | -7 |
| ANXIETY/DEPRESSION(not anxious or depressed) | 52 * | -10 | 6 | -2 | 12 | 19 | 1 | -14 | -13 |
| how good or bad your own health is TODAY | 72 * | -13 | 6 | 3 | 10 | 7 | 3 | 2 | 10 |
| Are you satisfied with your personal health | 72 * | -1 | 9 | 6 | 4 | -5 | 7 | 9 | 1 |

Printed values are multiplied by 100 and rounded to the nearest integer. Values greater than 0.4 are flagged by an ***.

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Mixing all Ingredients - Principal Components American Countries 2007 (cont)

| | HEALTH INN | INCOME DEPRIV INN | INCOME / WORK OUT | WORK INN | HEALTH INN | HEALTH/ EDUC ACCESS OUT | HEALTH/E DUC SATSIFAC TION OUT | INCOME DEPR /WORK POLICY SATSIFAC TION OUT | HEALTH/W ORK OUT |
|---|---------------|-------------------------|-------------------------|-------------|---------------|----------------------------------|---|---|---------------------|
| | Factor1 | Factor2 | Factor3 | Factor4 | Factor5 | Factor6 | Factor7 | Factor8 | Factor9 |
| In your city or area where you live are you satisfied or dissatisfied with the availability of quality health care | 5 | -5 | 12 | -1 | 0 | 11 | 79 * | 5 | 10 |
| Are healthcare services in this country accessible to any person who needs them regardless of their economic situation or not | 4 | 0 | 8 | 0 | -1 | 69 * | 24 | 5 | 15 |
| Not have health problems that prevent you from doing any of the things people your age normally can do | 60 * | -4 | -1 | 7 | 22 | -8 | -2 | 8 | 5 |
| If you had to go to a hospital because of an accident or illness who would take care of the cost of your assistance? Public or Private | -4 | -10 | 17 | 7 | 2 | 20 | 5 | -6 | 75 * |
| Do you have confidence in each of the following or not? How about health care or medical systems? | 1 | -1 | 9 | -2 | 0 | 19 | 68 * | 15 | 8 |
| are you satisfied with the educational system or the schools | 4 | 0 | 2 | 2 | 1 | 12 | 69 * | 7 | -17 |
| Is education in this country accessible to anybody who wants to study regardless of their economic situation or not? | 9 | -1 | 5 | 1 | -5 | 78 * | 6 | 11 | 0 |
| Do most children in this country have the opportunity to learn and grow every day | -2 | 5 | 10 | 1 | 1 | 58 * | 19 | 22 | -13 |
| Are you satisfied with your job or the work you do | 8 | -7 | 8 | 95 * | 4 | 1 | 0 | 1 | 3 |
| In your work do you have an opportunity to do what you do best every day? | 6 | -4 | 5 | 96 * | 5 | 1 | -1 | 1 | 2 |
| Can people in this country get ahead by working hard or not? | -5 | -5 | 31 | 2 | 7 | 30 | 6 | 1 | -57 * |
| Thinking about the job situation in the city or area where you live today would you say that it is now a good time or a bad time to find a job? | 12 | -8 | 52 * | 10 | -5 | 6 | 15 | 1 | -13 |
| Are you satisfied or dissatisfied with efforts to increase the number and quality of jobs? | 2 | -1 | 18 | 3 | -2 | 15 | 14 | 82 * | -1 |

Source: Microdata from the Gallup World Poll 2007

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Splitting - Income – Principal Components American Countries 2007

| | Rotated Factor Pattern | |
|--|-------------------------------|---------------------------|
| | Factor1 Income_ Dep_Inn | Factor2 Income _Out |
| Feelings about your household's income - Living comfortably or Getting by on present income | -60 * | 23 |
| Do you believe the current economic conditions in (response in Sa) are good or not | -11 | 75 * |
| Right now do you think that economic conditions in (response in Sa) as a whole are getting better or the same ? | -6 | 77 * |
| Are you satisfied or dissatisfied with efforts to deal with the poor? | 11 | 61 * |
| Right now do you feel your standard of living is getting better or the same? | -34 | 44 * |
| Have there been times in the past twelve months when you did not have enough money to provide adequate shelter or housing for you and your family? | 66 * | 6 |
| Have there been times in the past twelve months when you or your family have gone hungry? | 73 * | -2 |
| Have there been times in the past twelve months when you did not have enough money to buy food that you or your family needed? | 83 * | -5 |

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Splitting - Principal Components American Countries 2007

Work – Principal Components

| | Rotated Factor Pattern | |
|---|------------------------|---------------------|
| | Factor1 Work_inn | Factor2 Work_Out |
| Are you satisfied with your job or the work you do | 96 * | 5 |
| In your work do you have an opportunity to do what you do best every day? | 96 * | 3 |
| Can people in this country get ahead by working hard or not? | -4 | 61 * |
| Thinking about the job situation in the city or area where you live today would you say that it is now a good time or a bad time to find a job? | 13 | 69 * |
| Are you satisfied or dissatisfied with efforts to increase the number and quality of jobs? | 2 | 72 * |

Printed values are multiplied by 100 and rounded to the nearest integer. Values greater than 0.4 are flagged by an *.

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| Health – Principal Components American Countries 2007 | Factor1 | Factor2 | Rotated Factor Pattern |
|---|----------------|--------------------------|------------------------|
| | Health _inn | Health_inn_ permanent | Factor3 Health_Out |
| MOBILITY (have no problems walking around) | 34 | 72 * | -3 |
| SELF CARE (have no problems with self-care) | 7 | 82 * | 0 |
| USUAL ACTIVITIES (have no problems with performing my us - work study housework family or leisure activities) | 36 | 74 * | -1 |
| PAIN/DISCOMFORT(have no pain or discomfort) | 69 * | 29 | 1 |
| ANXIETY/DEPRESSION(not anxious or depressed) | 58 * | 8 | 6 |
| how good or bad your own health is TODAY | 73 * | 14 | 8 |
| Are you satisfied with your personal health | 71 * | 8 | 6 |
| In your city or area where you liveare you satisfied or dissatisfied with the availability of quality health care | 5 | 3 | 75 * |
| Are healthcare services in this country accessible to any person who needs them regardless of their economic situation or not | 3 | 1 | 66 * |
| Not have health problems that prevent you from doing any of the things people your age normally can do | 58 * | 25 | -3 |
| If you had to go to a hospital because of an accident or illnesswho would take care of the cost of your assistance? Public or Private | 5 | -6 | 33 |
| Do you have confidence in each of the following or not? How about health care or medical systems? | -1 | 4 | 76 * |

Printed values are multiplied by 100 and rounded to the nearest integer. Values greater than 0.4 are flagged by an '*'. www.fgv.br/cps

| Principal Components – Standartized: The PHDI ingredients | | | | | | | | | | |
|---|--------------|-------|------|------------|-------------|------|------|---------------|-----------|------------|
| Country | income_dep_i | | work | | health_inn_ | | | education_out | | |
| | Sample | % | inn | income_out | inn | out | inn | | permanent | health_out |
| argentina | 1000 | 4.68 | 0.80 | 0.67 | 0.56 | 0.41 | 0.51 | 0.75 | 0.63 | 0.25 |
| belize | 502 | 2.35 | 0.80 | 0.34 | 0.60 | 0.38 | 0.78 | 0.38 | 0.53 | 0.66 |
| bolivia | 1000 | 4.68 | 0.36 | 0.78 | 0.65 | 0.65 | 0.12 | 0.78 | 0.41 | 0.58 |
| brazil | 1038 | 4.86 | 0.79 | 0.70 | 0.76 | 0.25 | 0.65 | 0.53 | 0.25 | 0.27 |
| canada | 1010 | 4.73 | 1.00 | 1.00 | 1.00 | 0.97 | | | | |
| chile | 7272 | 34.03 | 0.77 | 0.58 | 0.46 | 0.54 | 0.66 | 0.60 | 0.50 | 0.52 |
| colombia | 1000 | 4.68 | 0.47 | | 0.33 | 0.37 | 0.66 | 0.78 | 0.45 | 0.30 |
| costa rica | 1002 | 4.69 | 0.73 | 0.76 | 0.51 | 0.72 | 0.95 | 0.50 | 0.94 | 0.99 |
| dominican rep | 1000 | 4.68 | 0.20 | 0.40 | 0.27 | 0.34 | 0.77 | 0.73 | | 0.67 |
| ecuador | 1061 | 4.97 | 0.36 | 0.67 | 0.60 | 0.35 | 0.39 | 0.95 | 0.20 | 0.23 |
| el salvador | 1001 | 4.69 | 0.16 | 0.26 | 0.00 | 0.10 | 0.66 | 0.73 | 0.41 | 0.50 |
| guatemala | 1000 | 4.68 | 0.83 | 0.46 | 0.32 | 0.47 | 1.00 | 0.55 | 0.29 | 0.36 |
| guyana | 501 | 2.34 | 0.76 | 0.27 | 0.54 | 0.24 | 0.62 | 0.63 | 0.80 | 0.69 |
| honduras | 1000 | 4.68 | 0.06 | 0.57 | 0.10 | | 0.77 | 0.35 | 0.42 | 0.59 |
| mexico | 999 | 4.68 | 0.57 | 0.75 | 0.51 | 0.52 | 0.65 | 0.00 | 0.47 | 0.00 |
| nicaragua | 1000 | 4.68 | 0.00 | 0.45 | 0.29 | 0.50 | 0.22 | 0.63 | 0.59 | 0.70 |
| panama | 1000 | 4.68 | 0.55 | 0.56 | 0.40 | 0.47 | 0.93 | 0.70 | 0.57 | 0.80 |
| paraguay | 1000 | 4.68 | 0.66 | 0.00 | 0.62 | 0.00 | 0.61 | 1.00 | 0.00 | 0.00 |
| peru | 1000 | 4.68 | 0.13 | 0.34 | 0.16 | 0.30 | 0.00 | 0.85 | 0.12 | 0.14 |
| uruguay | 1004 | 4.70 | 0.66 | 0.69 | 0.40 | 0.33 | 0.53 | 0.83 | 1.00 | 0.68 |
| venezuela | 1000 | 4.68 | | | 0.79 | 1.00 | | | | 1.00 |
| Max | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Min | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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CORRELATION BETWEEN INCOME, AGE AND PHDI COMPONENTS

Correlation between Per Capita Income and Principal Components America
PHDI Components Partial Correlation with Objective Per Capita Income

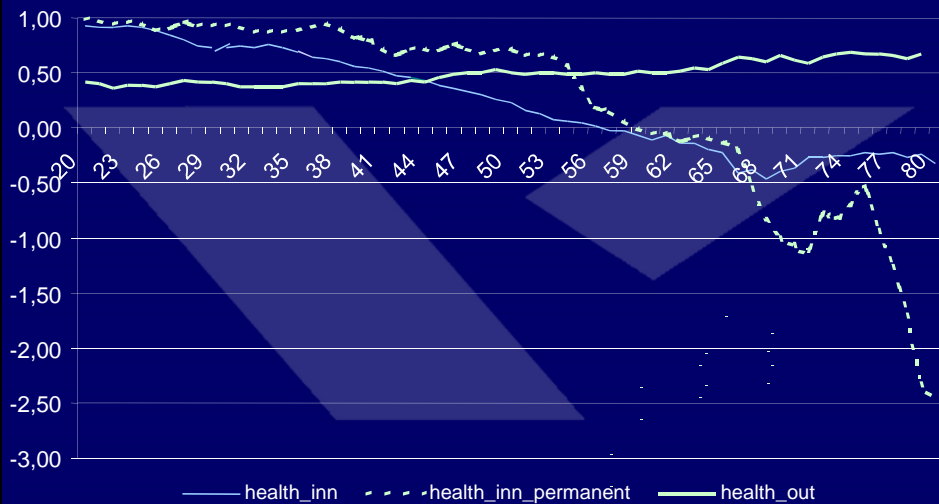
| Inner PHDI Components | Coefficient | p-value |
|-----------------------|-------------|---------|
| Income_dep_inn | -0.0005886 | <.0001 |
| Work_inn | 0.0003792 | <.0001 |
| Health_inn | 0.0003160 | <.0001 |
| Health_inn_permanent | 0.0000630 | 0.0050 |

| Outer PHDI Components | Coefficient | p-value |
|-----------------------|-------------|---------|
| Income_out | 0.0001083 | 0.0004 |
| Work_out | 0.0000548 | 0.1337 |
| Health_out | -0.0000311 | 0.3140 |
| Education_out | | |

Source: Microdata from the World Gallup Survey 2007

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The Life Cycle Pattern of the Perceived Human Development Indexes Components
Latin American Countries Standardized Principal Components and Years of Age
Centered Moving Average of 5 Years



Source: Microdata from the World Gallup Survey 2007

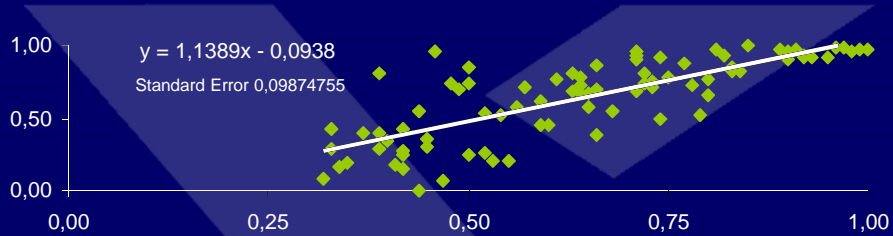
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PHDI & HDI

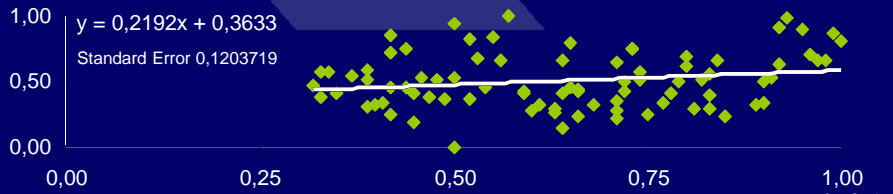
Gross Correlation Between Aggregated PHDI and Respective HDI Component

Source: Microdata from the World Gallup Survey 2006

Income_dep_inn (pda) x GDP id



Gross Correlation Between Aggregated PHDI and Respective HDI Component



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Correlation Between Disaggregated PHDI PCA and Respective HDI Component

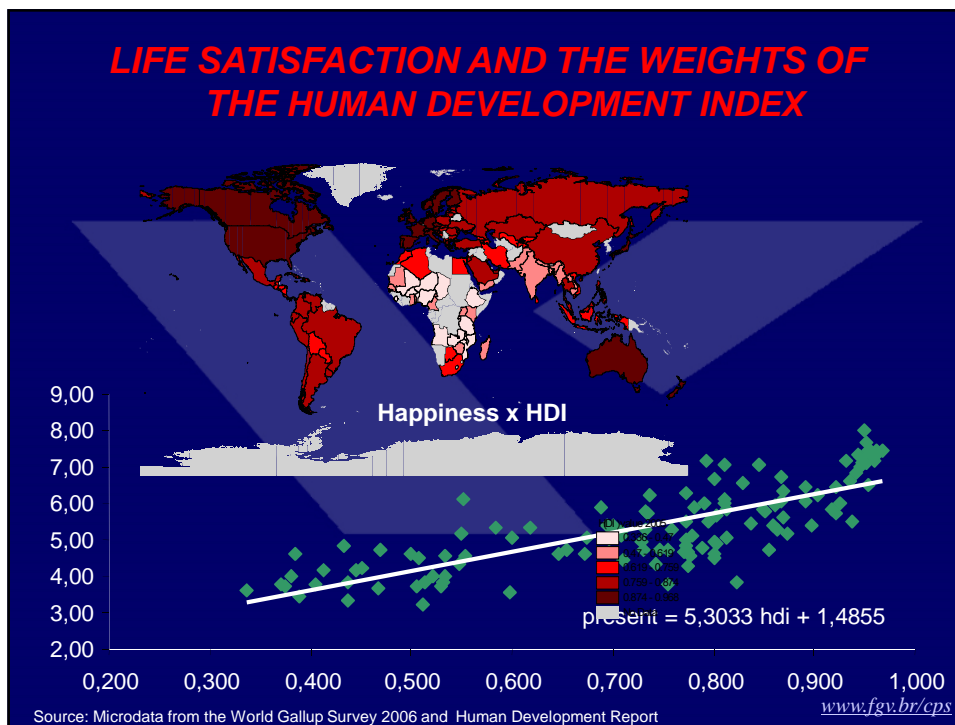
| | INCOME DEP INN | INCOME OUT | WORK INN | WORK OUT |
|---|----------------|------------|----------|----------|
| CTE | -2,1215 | 0,4959 | 0,9885 | 0,4454 |
| | 0,0212 | 0,024 | 0,0224 | 0,0234 |
| CTE + HDI COMPONENTS | -1,0093 | 1,3433 | 0,7912 | 1,0933 |
| | 0,0413 | 0,0447 | 0,0394 | 0,0398 |
| CTE + HDI COMPONENT + SOCIO- DEMOGRAPHICS* | -0,9051 | 2,1301 | 1,1801 | 1,3348 |
| | 0,0559 | 0,0651 | 0,0565 | 0,0602 |

| | HEALTH INN | HEALTH OUT | EDUCATION |
|---|------------|------------|-----------|
| CTE | 0,3779 | 0,9461 | 0,9245 |
| | 0,0235 | 0,0225 | 0,0194 |
| CTE + HDI COMPONENTS | 0,4378 | 0,3862 | 0,0876 |
| | 0,0414 | 0,039 | 0,0337 |
| CTE + HDI COMPONENT + SOCIO- DEMOGRAPHICS* | 1,9013 | 2,7852 | -0,6411 |
| | 0,092 | 0,0891 | 0,0493 |

* Obs: regressions include dummies for presence of children, for elderly, gender, position in the household and hdi components

Source: Microdata from the Gallup World Poll 2006 and Human Development Report

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Life-Satisfaction & Sector-specific Weights of the HDI at

Do you feel you personally stand at the pre

| Parameter Estimates | | | |
|------------------------|-----------|--------------------|----------------|
| Variable | Label | Parameter Estimate | Standard Error |
| Intercept | Intercept | 2,6338 | 0,0292 |
| <hr/> | | | |
| Past life satisfaction | | | |
| gross_ed | gross_ed | 0,0224 | 0,0007 |
| literacy | literacy | 0,0030 | 0,0005 |
| GDP_id | GDP_id | 0,6643 | 0,0564 |
| life_id | life_id | 0,3103 | 0,0564 |
| RESTRICT | | 3429,1786 | 66,2861 |

Sector-specific Weights of the PHDI
Do you feel you personally stand at the present time

| Variable | Parameter Estimates | |
|------------------------|---------------------|----------------|
| | Parameter Estimate | Standard Error |
| Intercept | 4,6571 | 0,0103 |
| Past life satisfaction | | |
| pincome_dep2 | 0,6423 | 0,0108 |
| income_out | 0,1765 | 0,0083 |
| health_inn | 0,0892 | 0,0080 |
| health_out | 0,0907 | 0,0090 |
| cp_education | 0,0014 | 0,0090 |
| RESTRICT | 14402,0000 | 229,4644 |

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Present Life Satisfaction in Latin America 2007 and the PHDI

| Do you feel you personally stand at the present | | | |
|--|-----------|-------------------------------------|----------------|
| Parameter | | Present Life Satisfaction Estimates | |
| | | Estimate | Standard Error |
| past life satisfaction | | | |
| has children | yes | 0.1396 | 0.0356 |
| has children | zno | 0.0000 | 0.0000 |
| AGE | 65 & More | 0.3298 | 0.0854 |
| AGE | z15 A 64 | 0.0000 | 0.0000 |
| income_dep_inn | | 0.5276 | 0.0181 |
| income_out | | -0.2670 | 0.0201 |
| work_inn | | -0.0461 | 0.0173 |
| work_out | | -0.1025 | 0.0202 |
| health_inn | | -0.3371 | 0.0194 |
| health_inn_permanent | | -0.0001 | 0.0193 |
| health_out | | -0.1024 | 0.0192 |
| education_Out | | -0.0045 | 0.0281 |
| education_Out* has children | yes | 0.0334 | 0.0336 |
| education_Out* has children | zno | 0.0000 | 0.0000 |
| health_inn*AGE | 65 & More | -0.0764 | 0.0598 |
| health_inn*AGE | z15 A 64 | 0.0000 | 0.0000 |
| work_inn*AGE | 65 & More | 0.1327 | 0.0877 |
| work_inn*AGE | z15 A 64 | 0.0000 | 0.0000 |
| Scale | | 1.0000 | 0.0000 |