Context Effect of Self-Rated Health and Its Cultural Sensitivity

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Self-Rated Health (SRH)

“In general, how would you rate your health?”

• Methodologically, so-so.
  – Large room for measurement error

• Empirically, great!
  – Asked in numerous surveys around the world
  – Strong predictor of mortality and morbidity
  – Caveat: Research mainly on English-speaking populations and some Scandinavian populations
Sensitivity of SRH#

% E-V-G Health in California Health Interview Survey

Before chronic conditions (No health context)
After chronic conditions (Within health context)

English (n=1191) 84.3% 82.2%
Spanish (n=824) 54.7% 66.8%
Eng Latino (n=254) 80.2% 89.5%

HRS vs. NHIS

- Health and Retirement Study
  - SRH asked as the first question
- National Health Interview Survey
  - SRH asked in the middle of questionnaire after a long series of detailed health conditions
- Comparison of estimates of ages 50+
  - Observational context effect
ELSA and SHARE

• English Longitudinal Study of Ageing and Survey of Health, Ageing and Retirement in Europe
  – W1 includes an experiment on SRH*
  – Within subject, SRH was asked twice at different locations with different scales

* Appears to be designed for comparing SRH response scales originally but question location was crossed.
Cross-Country Comparison – 1

% E-V-G Health by Country

Loc1 (No context)
Loc2 (Within context)
Cross-Country Comparison – 2

% VG-G-F Health by Country

Loc1 (No context)
Loc2 (Within context)
Cross-Country Comparison – 3

% VG-G Health by Country

- **Loc1 (No context)**
- **Loc2 (Within context)**

Countries: Germany, Sweden, Netherlands, Spain, Italy, France, Denmark, Greece, Switzerland, Swi-German, Swi-French, Belgium, Bel-French, Bel-Flemish, Israel, Isr-Hebrew, Isr-Arab, UK, US, US-Spanish
## Utility of SRH by Language – 1

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Spanish</th>
<th>English-Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n)</td>
<td>27629</td>
<td>1245</td>
<td>1325</td>
</tr>
<tr>
<td>% Deceased in HRS 2008</td>
<td>33.44</td>
<td>27.39</td>
<td>23.55</td>
</tr>
<tr>
<td>By SRH in the first interview</td>
<td></td>
<td></td>
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<tr>
<td>Excellent</td>
<td>16.55</td>
<td>14.81</td>
<td>13.82</td>
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<tr>
<td>Very good</td>
<td>23.14</td>
<td>27.93</td>
<td>14.34</td>
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<tr>
<td>Good</td>
<td>33.43</td>
<td>22.49</td>
<td>20.42</td>
</tr>
<tr>
<td>Fair</td>
<td>50.25</td>
<td>27.53</td>
<td>32.17</td>
</tr>
<tr>
<td>Poor</td>
<td>65.46</td>
<td>42.15</td>
<td>45.28</td>
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</tbody>
</table>
### Utility of SRH by Language – 2

**Y: Alive or not as of 2008**

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Spanish</th>
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</tr>
</thead>
<tbody>
<tr>
<td>(n)</td>
<td>27581</td>
<td>1244</td>
<td>1316</td>
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<tr>
<td>Intercept</td>
<td>0.42</td>
<td>0.99</td>
<td>1.07</td>
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<tr>
<td>EVG health 1</td>
<td>0.65</td>
<td>0.27</td>
<td>0.53</td>
</tr>
<tr>
<td>Intercept</td>
<td>8.93</td>
<td>9.12</td>
<td>8.55</td>
</tr>
<tr>
<td>EVG health 1</td>
<td>0.42</td>
<td>0.03</td>
<td>0.28</td>
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<tr>
<td>Age 1</td>
<td>-0.13</td>
<td>-0.13</td>
<td>-0.11</td>
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<tr>
<td>Female</td>
<td>0.25</td>
<td>0.28</td>
<td>0.40</td>
</tr>
<tr>
<td>High school or less</td>
<td>-0.15</td>
<td>0.15</td>
<td>-0.19</td>
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<tr>
<td>Currently not a smoker</td>
<td>0.49</td>
<td>0.33</td>
<td>0.27</td>
</tr>
<tr>
<td># Health conditions 1</td>
<td>-0.30</td>
<td>-0.50</td>
<td>-0.46</td>
</tr>
</tbody>
</table>
Implications

• Complicated measurement error with SRH
  – Varying context effect by language
    • Absence of context effect in English does not guarantee that in another language
  – Decreased utility of SRH in Spanish (or incomparable utility of SRH between English and Spanish)
    • Response scale: Translational and cultural issues
    • Location of SRH?

• Reasons behind the error yet to be seen
Thanks!

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