Case Example Secondary Data:
Marital Status and Mental Health -
US and Japan Comparison

Jim Raymo
June 23, 2013
Overview

• Three examples of cross-national research using secondary data
• Sources of data
• Issues
• Solutions
• Insights (e.g. what do we learn from each that we couldn’t get from single country study)
• Funding?
Marriage and health in mid-life: A U.S.-Japan comparison

1) Is marriage associated with better mental and physical health?
2) Are the health advantages associated with marriage stronger for men than women?
3) Are the health benefits of marriage limited to those in higher-quality marriages?
4) To what extent are the health benefits of marriage due to more favorable economic circumstances among married persons?
5) How do the patterns documented in questions 1-4 differ in the U.S. and Japan?
Changes in Family Structure and Economic Well-being in Twenty Nations

1) Describe socioeconomic differentials (measured primarily by education) in family behaviors and differences across countries

2) Evaluate how family transitions and structure are linked to economic well-being and how these relationships differ across countries

3) Evaluate the extent to which observed differences across countries may depend on characteristics such as public policies or aggregate economic circumstances
Living Arrangements and the Economic Well-being of Single Mothers: A Cross-national Comparison

1) Describe cross-country differences in living arrangements of single mothers (lone parent vs. coresiding with parents/relatives)

2) How does the prevalence of poverty among single mothers depend on living arrangements? How do these relationships differ across countries?

3) To what extent are differences across countries in poverty among single mothers explained by differences in living arrangements?

4) To what extent does the reduction of poverty among single mothers coresiding with parents/relatives reflect additional income? To what extent does it reflect economies of scale? To what extent do these relationships differ across countries?
Sources of Data

1) Surveys designed to be explicitly comparable
   - MIDUS and MIDJA

2) Surveys that in theory should be comparable
   - GGS and other family surveys
   - 20 different countries

3) Carefully harmonized surveys
   - CNEF
   - 5 countries
Issues 1

1) Sampling differences
   • National vs. other

2) Differences in composition of samples
   • Marital status
   • Race (typically limit US to whites Good? Bad?)

3) Differences in the meaning of questions?
   • Scales may be different – maybe not such a big problem if interest is in co-variation rather than levels
Issues 2

1) Inconsistent content
   • e.g., income, parental SES
2) Inconsistent wording of questions
   • e.g., income
3) Harmonizing fundamentally different measures
   • e.g., educational attainment
4) Major differences in distribution of key measures
   • e.g., “early” childbearing, low/high education
1) Differences in definition/categories of key variables
   • e.g., marital status
2) Potential differences in the meaning of categories (or w/in category variation)
   • e.g., cohabiting unions
3) Policy differences that impact measurement
   • no equivalent of social security income in Australian survey
4) Possible unobserved differences that impact the validity of key assumptions
   • what if degree of income sharing within coresidential households is not the same across countries?
Solutions 1

1a) Acknowledge sampling frame differences and move on?
1b) Limit US analyses to residents of large urban areas?
2a) Use non-equivalent measures of marital status?
2b) Collapse previously married and never married in U.S.?
2c) Limit to whites in the U.S.
3) Differences in scale are more problematic if one is interested in levels rather than differentials
Solutions 2

1a) Restrict analytic sample to available countries?
1b) Look for other measures of concept of interest that are consistently available (e.g., self-reported economic well-being)?

2, 3) Recode to produce consistent measures
   • Measurement is constrained by information in the least informative survey

4) Use alternative measures of concept of interest
   • Early childbearing (multiple thresholds)
   • Educational attainment (collapse categories, use non-equivalent measures across countries)
Solutions 3

1a) Acknowledge limitations and move on?
1b, 2) Go back to original data files, merge in additional information, conduct sensitivity analyses

3) Must make assumptions
   - we assume 50-50 split of public transfers
   - evaluate sensitivity by considering alternative assumptions

4) Acknowledge possibility and move on
   - We can’t imagine any plausible assumptions in the absence of reliable external information
Insights 1

![Graph showing estimated differences in self-rated health, positive affect, and negative affect between currently married, formerly married, MIDUS(M), MIDUS(W), MIDJA-Men, and MIDJA-Women. The graph includes p-values for comparisons, with p<.01 and p<.05 indicating statistically significant differences.]

- Self-rated health: M≠F (p<.01)
- Positive affect: M≠F (p<.01)
- Negative affect: M≠F (p<.05)
Insights 2

• Growing gap between least educated and more educated across most countries
• Consistent with observations from U.S.
• Consistent with notion of “diverging destinies”
• No consistent patterns across policy contexts
Insights 3

Figure 6: Observed and Counterfactual Income Distributions When Single Mothers Living With Others Are Assumed To Be Lone Mothers
Insights 3

Figure 9: Observed and Counterfactual Income Distributions for Unpartnered Mothers CORESiding with Other Adults, by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Observed</th>
<th>No additional income</th>
<th>No economies of scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>46%</td>
<td>22%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>70%</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>61%</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>12%</td>
<td>4%</td>
<td>16%</td>
</tr>
<tr>
<td>UK</td>
<td>13%</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>82%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>49%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>38%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>19%</td>
<td>37%</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>70%</td>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>51%</td>
<td>21%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>3%</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>53%</td>
<td>33%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>20%</td>
<td>24%</td>
<td>4%</td>
</tr>
<tr>
<td>Korea</td>
<td>12%</td>
<td>14%</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>34%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>47%</td>
<td>37%</td>
<td>10%</td>
</tr>
</tbody>
</table>

% poor  % near poor  % working class  % middle class
Funding

- Tremendous lip-service to value of CN research
- Clearly support for data collection
- Secondary analysis is a harder sell
- Difficulty articulating why insights outweigh the many limitations
- Support from NSF