Culture & Survey Measurement

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What is culture?

It is “the collective programming of the mind which distinguishes the members of one group from another” (Hofstede, *Culture’s Consequences*, 1980, p. 21)
What is culture? cont’d

The “shared elements that provide the standards for perceiving, believing, evaluating, communicating, and acting among those who share a language, a historic period, and a geographic location” (Triandis, *American Psychologist*, 1996).
Some dimensions of culture

- Individualism/collectivism
- Uncertainty avoidance
- Power distance
- Long vs. short term time orientation
- Cultural tightness & complexity
- Openness-to-change vs. Conservatism
- Self-enhancement vs. Self-transcendence
Some dimensions of culture cont’d

- Achievement vs. ascription
- Neutral vs. emotional expression of feelings
- Diffuse vs. specific involvement in affairs of others
- Vertical vs. horizontal relationships
Elements of social measurement in cross-cultural research

1. Reliability
2. Validity
3. Equivalence
Types of equivalence

1. Calibration
2. Complete
3. Conceptual
4. Construct
5. Construct operationalization
6. Content
7. Contextual
8. Credible
9. Criterion
10. Cross-cultural
11. Cross-national
12. Cultural
13. Definitional
14. Direct
15. Exact
16. Experiential
17. Factor
18. Factorial
19. Formal
20. Full
21. Functional
22. Grammatical-syntactical
23. Indicator
24. Idiomatic
25. Instrument
26. Item
27. Language
28. Lexical
29. Linguistic
30. Literal
31. Meaning
32. Measurement
33. Measurement unit
34. Metaphorical
35. Metric
36. Motivational
37. Normative
38. Operational
39. Pseudo
40. Psychological
41. Psychometric
42. Relational
43. Relative
44. Response
45. Scalar equivalence
46. Scale
47. Semantic
48. Situational
49. Stimulus
50. Structural
51. Substantive
52. Syntactic
53. Technical
54. Text
55. Theoretical
56. Translation
57. True-score
58. Verbal
59. Vignette equivalence
60. Vocabulary
Two general forms of equivalence

- **Procedural Equivalence**
  Emphasis on equivalent methods

- **Interpretive Equivalence**
  Emphasis on equivalent meaning
Cognitive survey response model

- Question interpretation
- Memory retrieval
- Judgment formation
- Response editing
Question interpretation/comprehension

- Emic (culture specific)
- Etic (pancultural)
Category fallacy

Assuming a question or concept is universally understood when in fact understanding is culturally conditioned
“In this question, what does the word ‘stress’ mean to you?”
Comprehension difficulties by reading difficulty & race/ethnicity

- White
- African American
- Mexican American
- Puerto Rican

Reading difficulty level (U.S. grade level):
- Less than 6th grade
- 6th-8th grade
- Grade 9+

Proportion with comprehension difficulties
Comprehension difficulties by abstraction level & race/ethnicity
Comprehension difficulties for vague quantifier format by race/ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>11.0%</td>
</tr>
<tr>
<td>Mexican American</td>
<td>12.5%</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>12.6%</td>
</tr>
<tr>
<td>White</td>
<td>6.6%</td>
</tr>
</tbody>
</table>
Comprehension difficulties for numeric question format by race/ethnicity

- African American: 18.9%
- Mexican American: 20.0%
- Puerto Rican: 21.2%
- White: 15.6%
Comprehension difficulties for yes/no format by race/ethnicity

- African American: 7.2%
- Mexican American: 6.7%
- Puerto Rican: 7.7%
- White: 4.3%
Memory retrieval

- Episodic vs. semantic search strategies
- Memory cues
Judgment formation

- Accessibility
- Anchoring
- Response formatting
- Response styles
Measurement artifacts in survey research

- Extreme Response Styles
- Acquiescent Response Style
- May be misinterpreted as substantive differences across groups
Extreme response style

- The tendency to select endpoints of a response scale
Acquiescent response style

- The tendency to agree with survey questions, regardless of question format (also known as "yea-saying.")
1. Strongly disagree
2. Somewhat disagree
3. Neither disagree nor agree
4. Somewhat agree
5. Strongly agree
Cross-cultural findings: Extreme response styles (ERS)*

- More ERS in countries high in uncertainty avoidance
- Less ERS in countries high in individualism

*van de Vijver (2004). Symposium on Cross-Cultural Survey Research, SRL, Urbana, IL.
Cross-cultural findings:
Acquiescence (ACQ)*

- More ACQ in countries high in uncertainty avoidance & power distance
- Less ACQ in countries high in individualism

*van de Vijver (2004). Symposium on Cross-Cultural Survey Research, SRL, Urbana, IL.
Response editing

- Self presentation
- Social desirability
- Interviewer effects
% uncomfortable discussing alcohol use with interviewers from same/different cultural groups
Available methods for addressing cross-cultural equivalence

A. Question Development Phase
B. Questionnaire Pretesting Phase
C. Data Collection Phase
D. Data Analysis Phase
Question development stage

1. Expert consultation/collaboration
2. Ethnographic & other qualitative approaches
3. “Good” question-wording practices
4. “Good” translation practices
5. Facet analysis
Questionnaire pretesting phase

1. Cognitive interviews/structured probes
2. Comparative response scale calibration
3. Comparative behavior coding
4. Compare alternative data collection modes
Data collection phase

1. Use multiple indicators
2. Use both emic & etic questions
3. Respondent/interviewer matching
Data analysis phase

1. Item analysis
2. Item response theory
3. Anchoring vignettes
4. Confirmatory factor analysis
5. Multidimensional scaling
6. Applying statistical controls
7. Identity-equivalence method
Thank You.

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