Understanding the Role of Quantitative Methods in a Culturally Competent Approach to Evaluation

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Part One: Review and Synthesis of Existing Articles using a Culturally Competent Approach
   a) Motivation
   b) Description of selected articles
   c) Challenges with using quantitative measures
   d) Document strategies for using quantitative measures

Part Two: Case of the UC Berkeley Athletic Study Center Evaluation
   a) Evaluation case background
   b) Constructing, validating, calibrating two quantitative measures
   c) Survey Analysis via the Latent Growth Item Response Model
Part One:
Review and Synthesis of Existing Cases
“Without attention to the complexity and multiple determinants of behavior, evaluations can arrive at flawed findings with potentially devastating consequences,” (American Evaluation Association, 2011, p. 2)
Motivating Study:

Emphasis on Qualitative Methods

Problems with Standardized Measures
Agenda for Future Research:

Can quantitative approaches help evaluators better engage culture?

If so, which (if any) approaches would be consistent with cross-cultural evaluation?
Research Questions

1. To what extent do evaluators using culturally competent approaches incorporate quantitative methods?

2. How do evaluators incorporate quantitative measures in a way that aligns with culturally competent evaluation approaches?

3. When using quantitative methods in evaluation, what are common strategies that align with a culturally competent evaluation approach?
Cultural Competence: A Definition

**Cultural Competence:** “A stance taken toward culture, not a discrete status or simple mastery of particular knowledge and skills. A culturally competent evaluator is prepared to engage with diverse segments of communities to include cultural and contextual dimensions important to the evaluation,” (American Evaluation Association, 2011, p. 1).
Culturally Responsive Evaluation Framework

1. Prepare for the evaluation
2. Engage stakeholders
3. Identify purpose of the evaluation
4. Frame the right questions
5. Design the evaluation
6. Select and adapt instrumentation
7. Collect the data
8. Analyze the data
9. Disseminate and use the results

Transformative Research and Evaluation
Donna M. Mertens

Multicultural Validity and Evaluation Theory
REL Pacific at McREL
Karen E. Kirkhart, Ph.D.
What is a Culturally Competent Approach
Sample & Method

1. Extend Chouinard and Cousins’ original sample to 2016

2. Systematically review and code all studies sampled from 1991-2016
Sample Characteristics

110 Total Reviewed Studies

- 2014-2016: 35
- 2009-2013: 23
- 1991-2008: 52

Evaluation Case Contexts

- Social Services: 22
- Health: 28
- Education: 40
- Community Development: 20
To what extent do evaluators using culturally competent approaches incorporate quantitative methods?

<table>
<thead>
<tr>
<th>Use of Quantitative &amp; Qualitative Methods</th>
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<tbody>
<tr>
<td>Mixed Methods</td>
</tr>
<tr>
<td>Qualitative Only</td>
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<tr>
<td>Quantitative Only</td>
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</table>
To what extent do evaluators using culturally competent approaches incorporate quantitative methods?

<table>
<thead>
<tr>
<th>Classification</th>
<th>Percentage</th>
<th>Count (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclear</td>
<td>9%</td>
<td>6</td>
</tr>
<tr>
<td>Quantitative-Dominant</td>
<td>19%</td>
<td>13</td>
</tr>
<tr>
<td>Equivalent</td>
<td>44%</td>
<td>30</td>
</tr>
<tr>
<td>Qualitative-Dominant</td>
<td>28%</td>
<td>19</td>
</tr>
</tbody>
</table>
How and for What Purpose?

Of the 74 studies using quantitative methods:
- Two used t-tests
- Two used ANOVA
- One used multivariate regression
- Three used an RCT design

For what purpose was a quantitative method used?

- Overall summative judgement: 36
- Formative improvement & learning: 17
- Development: 3
- Knowledge Generation: 9
- Social Justice: 8
58% of studies (n=64) used a quantitative measure

How do evaluators incorporate quantitative measures in a way that aligns with culturally competent evaluation approaches?
Of the studies using quantitative measures, 48% (n=31) described a challenge with using a quantitative measure.
Challenge One: Translated instruments lose conceptual meaning
Challenge Two: Funder-mandated instruments are not appropriate for local culture.
Challenge Three: Lack of content validity with existing instruments
Challenge Four: Inappropriate data collection methods
Challenge Five: Flawed Items Design
Agenda for Future Research:

Can quantitative approaches help evaluators better engage culture?

If so, which (if any) approaches would be consistent with cross-cultural evaluation?
When using quantitative methods in evaluation, what are common strategies that align with a culturally competent evaluation approach?
Consult Participants about Randomization
Use item design features consistent with narrative culture
Use community members or youth to administer quantitative instruments
Disaggregate findings by key subgroups, paying attention to differences between and within groups.
1) How, if at all, can measurement and constructing measures help us to further align quantitative methods with a culturally competent approach to evaluation?

2) How, if at all, can advanced statistical modeling help us better engage with and respond to culture?