Exploring the Interface of Indigenous Traditional Knowledge & the Health Sciences

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Opening
Who Am I?

- Academic Psychologist
  - Clinically-Trained
  - Community-Engaged
  - Culturally-Attuned

- Research Interests
  - Culture & Mental Health
  - Indigenous Psychologies
  - Cross-Cultural Interventions
Presentation Goals

- Situate my perspective
- Review Indigenous Traditional Knowledge
- Describe normative inquiry in the Health Sciences
- Consider the interface of these approaches to "knowing"
Situating My Perspective

Round 1
Situating My Perspective

- Interdisciplinary Influences
  - Clinical Psychology $\rightarrow$ psychosocial treatments + scientific methods
  - Cultural Anthropology $\rightarrow$ “thick” description + interpretive insights
  - Native American Studies $\rightarrow$ contemporary Indigenous issues + critical analysis
Situating My Perspective

- Relevant Scholarship
  - Comparison of Therapeutic Practices (*Gone, 2010*)
    - Psychotherapy & psychosocial interventions
    - Sacred Indigenous healing traditions
  - Divergence in Evaluative Paradigms (*Gone, 2012*)
    - General (nomothetic) claims based on statistical trends in large samples
    - Particular (idiographic) claims based on self-evident personal experience
Assumptions About Indigenous Traditional Knowledge (ITK)

- ITK originated prior to European contact
- ITK was altered, disrupted, suppressed, & sometimes even eradicated during European colonization
- Some forms of ITK persist today
- Modern forms of ITK reflect histories of contact & exchange
- TEK is a subset of ITK
- I will focus on ITK more broadly
Indigenous Traditional Knowledge

Round 2
Indigenous Traditional Knowledge

Marlene Brant Castellano’s (2000) ITK

Sources

- Traditional teachings (reproduced across generations)
  - Example: Myths & tales, technological know-how

- **Empirical knowledge** (accumulated from careful observation)
  - Example: Caribou migration patterns

- Revealed knowledge (spiritually given in dreams & visions)
  - Example: Black Elk’s grand vision
Indigenous Traditional Knowledge

Brant Castellano’s (2000) ITK (cont)

- Characteristics
  - **Personal** – tied to the integrity & perceptiveness of the knower as opposed to general & authorized by unknown others
  - **Oral** – communicated in-person & with responsibility for transferring power as opposed to written or recorded for sharing with unknown others
  - **Experiential** – subjectively felt, richly interpreted, & deeply introspective as opposed to abstract & removed from lived experience
  - **Holistic** – perceived across the domains of the self (intellectual, spiritual, emotional, & physical) as opposed to merely rationally considered
  - **Narratively conveyed** – in keeping with diverse genres employing oblique instruction as opposed to delineating principles & propositions / rendering admonitions & judgments
Indigenous Traditional Knowledge

Considering ITK (at NIH)

- Principal Interest in:
  - Empirical Knowledge of various kinds
  - Possibly some Traditional Teachings?
  - Probably *not* Revealed Knowledge

- Notable Characteristics include:
  - Personal & particular rather than abstract & general
  - Holistically experienced across rational, emotional, & intuitive registers
  - Valued for subjective & introspective qualities
  - Authority & influence tied to reputation of knower
  - Sharing tied to specific relationships & responsibilities
Inquiry in the Health Sciences

Round 3
Knowledge in the Health Sciences is based on Scientific Inquiry

What is Scientific Inquiry? *(Gone, 2011)*

- Caveat: challenging to generalize across scientific fields
- Distinctive synthesis of Rationalism & Empiricism

Involves the **precise measurement** of phenomena by an **interchangeable observer** that is used to evaluate **falsifiable explanations** of such phenomena

- Usually entails statistical analysis of relevant variables
- Subjected to **skeptical interrogation** by peer scientists for publication
- Depends on **replication** of findings across studies for acceptance
Inquiry in the Health Sciences

- Sizing Up Scientific Inquiry
  - Advantages
    - Best way to attempt to answer certain kinds of crucial questions (efficacy of pharmaceuticals)
    - Extension of human rationality beyond unaided powers of reason (cognitive prosthesis)
  
  - Complications
    - Answers to crucial questions can be extremely elusive
    - Science depends on assumptions that are under-examined & even ignored
    - Science works better in theory than in practice
    - Example: “Most published research findings are false” (Ioannidis, 2005)
Inquiry in the Health Sciences

- Considering Scientific Knowing (at NIH)
  - Deemed best way to produce health knowledge (Beyond Dispute)
    - Limits the kinds of questions that can be asked
    - Limits the methods of inquiry that can be used
  - Notable Characteristics include:
    - Probabilistic, abstract, & general rather than certain, concrete, and particular
    - Rationally evaluated in skeptical fashion
    - Valued for objective & unbiased qualities
    - Authority & influence tied to robust research methods & replication of findings
    - Sharing tied to publication following anonymous & blinded peer review
Considering the Interface of ITK & Health Science

Round 4
“The key to understanding Indian knowledge of the world is to remember that the emphasis was on the particular, not on general laws and explanations of how things worked . . .”

*Deloria, 2001, p. 22*
Considering the Interface

- Clear divergences in attributes of ITK & Scientific Knowing
- How best to conceptualize this interface?

Four Possibilities for Resolving these Divergences

- #1: Divergences at this Interface are more Apparent than Real (Compatibility)
  - My descriptions are erroneous &/or overgeneralized
  - Some kinds of empirical knowledge within ITK are so compatible with scientific knowing that they would be accepted without further confirmatory research by health scientists
  - Implication: ITK & scientific knowing emerge as equally valid & valued ways of knowing in response to pressing questions about health
Considering the Interface

Four Possibilities (cont)

- #2: The Divergences at this Interface should be resolved by privileging ITK
  - Despite European settler efforts to denigrate & eradicate ITK, it properly persists in guiding (some) AI lives
  - In contrast to the decontextualized sterilities of scientific knowing, ITK is time-tested, highly adaptive, & better-suited for a fuller human life
  - Implication: ITK has not been properly understood & appreciated & may address health concerns in ways that the hegemony of science has thus far precluded

- #3: The Divergences at this Interface should be resolved by privileging Scientific Knowing
  - Whatever the virtues of ITK, it remains “folk knowledge” that contains truths, half-truths, and errors
  - Only scientific knowing can sort out which is which (separating the wheat from the chaff)
  - Implication: ITK may be suited for hypothesis formation, but can contribute little more of value for the health sciences
Considering the Interface

Four Possibilities (cont)

#4: The Divergences at this Interface are Fundamentally Irreconcilable

- Both knowledge traditions have limitations, & both have something to contribute
- In many respects, they address different concerns & different domains of experience
- Perhaps best conceptualized as two circles that touch but never overlap

- HOWEVER, sometimes these will overlap
- Direct conflict & contradiction between claims based on these knowledge traditions are possible & (on occasion) even likely
- Example: “This specific herbal medicine does/does not remedy these symptoms”
- Proponents of ITK and Scientific Knowing may simply part ways over such disagreements
Closing
What’s at Stake at the Interface?

- I do not think it very likely that:
  - These knowledge traditions are fully compatible (Possibility #1)
  - ITK will attain primacy in the health sciences or wider society (Possibility #2)

- Rather, I think that proponents of:
  - ITK will assert its legitimacy & propose peaceful co-existence & mutual regard (Possibility #4)
  - Scientific Knowing will routinely (even if tacitly) reject ITK as mere “folk knowledge” that must bow to scientific authority (Possibility #3)

- If so, is it desirable/useful/helpful/defensible/ethical to introduce ITK into this kind of interaction?
Recommendation

Federal agencies should solicit & fund collaborative & participatory research on present-day assumptions, logics, methods, & practices associated with forms of ITK with the greatest potential for relevance to the health sciences.
Website

- For more information about my scholarship (& to download my publications), please visit my website at:

  http://gonetowar.com

- Thank You!