Measuring Competence in Field Settings: Improving Reliability and Validity
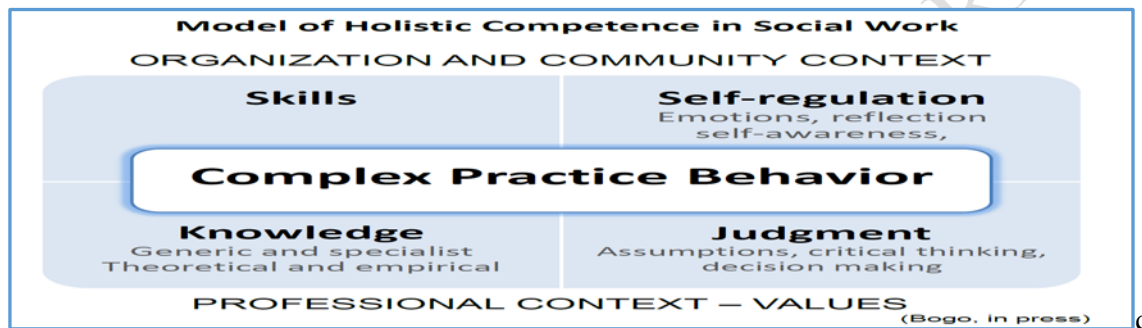Discussion Points and Supplemental Resources
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1. Prior Research and Motivating Assumptions
   a. Valid and reliable assessment of student competency is crucial
   b. Field instructors serve as a key rating resource, with some noted limitations (Bogo et al., 2007; Regehr et al., 2007)
   c. Behaviorally based anchors are crucial in ratings (e.g., Bogo, 2014)
   d. Measurement validation and refinement is a lengthy and iterative process (Adcock, 2001)
   e. Measurement hinges on well-defined constructs
2. Holistic Competence as an Organizing Construct (Bogo, 2014)

Model of Holistic Competence in Social Work
ORGANIZATION AND COMMUNITY CONTEXT
Skills
Self-regulation
Emotions, reflection self-awareness,
Complex Practice Behavior
Knowledge
Generic and specialist
Theoretical and empirical
Judgment
Assumptions, critical thinking, decision making
PROFESSIONAL CONTEXT — VALUES (Bogo, in press) c

   a. EPAS (2008) standards and practice behaviors generally map to this model
   b. Expectation that there may be an underlying latent uni-dimensionality to holistic competence
3. Instrument Development: Context, procedures, and process
   a. Context
      i. University-based field faculty with deep practice expertise
      ii. Longstanding commitment to assessment of student competencies pre-EPAS
      iii. History of strong collaborative relationships with field agencies and instructors
      iv. Signals valuation of field instruction as well as field instructor input
      v. Well-developed field instructor training infrastructure
         1. See: https://www.youtube.com/watch?v=u37dibkLEWE
   b. Procedures (see Ayasse (2016))
      i. Use of expert consultation
      ii. Reaffirmation activities allowed for feedback from field instructors
         1. Instructors desired feasible and meaningful tools
      iii. Use of focus groups and piloting opportunities
      iv. Provided training on rationale and use of instrument
4. Instrument Description (see other handouts)
   a. Completed by Field Instructors 12 Areas reflecting EPAS 2008 and Holistic Competence (Engagement, Consultation, Coordination and Collaboration, Assessment, Intervention Planning, Intervention Implementation, Systemic Intervention, Evaluation, Transition

Planning, Communication Skills, Professional Ethics, Professional Conduct, Professional Growth and Development)

  b. 55 items on a three point behaviorally anchored scale indicating: Not proficient, Competent, and Advanced; Option for unable to assess

5. Assessment of Psychometric Properties
   a. Basic reliability assessment of items reflecting 10 EPAS competency standards
   b. Use Rasch Rating Scale methods to:
      i. Assess general properties of items and scale
      ii. Assess uni-dimensionality (i.e., empirical face and content validation)
   c. Sample: Pooled cohort of 183 Berkeley students rated by 155 field instructors at close of first year of MSW program
   d. Reduced 55 items into 41 EPAS practice behaviors for ease of interpretation
   e. Treated "unable to respond" as missing

6. Results
   a. Descriptive Statistics
      i. Across most items (i.e. practice behaviors), the modal student was assessed as "competent" (75-80%), a significant minority were rated as "advanced" (15-20%)
      ii. On all but a few items, "unable to assess" and "not proficient" were not utilized (1-2%)
   b. Instrument reliable (alpha=.89) and unidimensional (ordering of practice behaviors reflect Holistic Competence)
   c. Evidence of muted fit (<.5) suggests less productivity for measurement, but not "degrading" to measure
      i. In rating context, suggests overuse of middle category (collusion, hidden constraints, conservatism)

7. Implications and Next Steps
   a. Tweaking needed
      i. More discrimination or more items?
         1. Emerging proficiency (Bogo, 2014)
      ii. Some items difficult to observe?
      iii. Problematic wording
   b. Illustration of context and process of measurement development and initial testing
      i. Long Horizon

References:

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Measure	Infit	Z	Outfit	Z	Item
Hardest to rate as advanced					
1.77	0.68	-1.4	0.34	-1.7	Recognize and manage personal values in a way that allows professional values to guide practice
1.54	0.96	-0.1	0.39	-1.5	View themselves as learners and those with whom they work as informants
1.53	0.81	-0.8	0.36	-1.6	Help clients resolve problems
1.43	0.49	-2.8	0.17	-2.6	Provide leadership in promoting sustainable changes in service delivery and practice to improve the quality of services
1.33	0.83	-0.8	0.37	-1.6	Collect, organize and interpret client data
1.13	0.63	-2	0.33	-1.8	Engage in practices that advance social justice
0.95	0.96	-0.1	1.24	0.6	Utilize conceptual frameworks to guide the process of assessment, intervention, and evaluation
0.87	0.87	-0.6	0.69	-0.6	Engage in policy practice/ collaborate with colleagues for effective policy action
0.8	1.09	0.5	1.12	0.4	Develop mutually agreed on goals and objectives
0.78	0.89	-0.5	0.51	-1.2	Critique and apply knowledge to understand person and environment
0.73	1.1	0.6	1.12	0.4	Initiate actions to achieve organizational goals
0.62	0.76	-1.3	1.03	0.2	Select appropriate intervention strategies
0.62	0.77	-1.3	0.55	-1.1	Distinguish, appraise, and integrate multiple sources of knowledge
0.54	0.81	-1.1	0.54	-1.1	Advocate for human rights and social and economic justice
0.5	1.15	0.8	1.08	0.3	Use empathy and other interpersonal skills
0.44	1.05	0.3	0.79	-0.3	Continuously discover, appraise, and attend to contexts of practice
0.39	0.75	-1.6	0.54	-1.1	Implement prevention interventions that enhance client capacities
0.39	0.85	-0.8	0.63	-0.8	Analyze, monitor, and evaluate interventions
0.35	0.95	-0.3	1.14	0.4	Use research evidence to inform practice
0.32	1.1	0.7	0.77	-0.4	Attend to professional roles and boundaries
0.18	0.96	-0.2	0.52	-1.2	Substantively and affectively prepare for actions with individuals, families, groups, organizations and communities
0.04	1.2	1.3	1.04	0.2	Demonstrate effective oral and written communication
0.04	0.91	-0.5	0.69	-0.7	Assess client strengths and limitations
-0.01	0.84	-1.1	0.56	-1.1	Use practice experience to inform scientific inquiry
-0.14	1.28	1.8	1.5	0.5	Develop a mutually agreed upon focus of work and desired outcomes

Measure	Infit	Z	Outfit	Z	Item
-0.14	1.16	1.1	0.93	0	Facilitate transitions and endings
-0.14	1.17	1.1	1.1	0.4	Engage in career long learning
-0.2	0.86	-1	0.59	-1	Analyze models of assessment, prevention, intervention, and evaluation
-0.38	1.11	0.8	0.85	-0.2	Advocate for client access to the services of social work
-0.38	1.11	0.8	0.85	-0.2	Negotiate, mediate and advocate for clients
-0.48	1.12	0.9	0.95	0	Practice personal reflection and self-correction to assure continual professional development
-0.57	1.14	1.1	1.07	0.3	Apply strategies of ethical reasoning to arrive at principles decisions
-1.1	1.1	0.9	1.52	1.4	Gain sufficient self-awareness to eliminate the influence of personal values and biases
-1.2	1.19	1.7	1.32	1	Use supervision and consultation
-1.41	1.07	0.7	1.37	1.2	Understand the forms and mechanisms of oppression
-1.9	0.9	-1	0.71	-1.1	Make ethical decisions by applying standards of the NASW Code of Ethics
-1.98	1.09	0.9	0.99	0.1	Recognize and communicate understanding of importance of difference in shaping life experiences
-2.27	1.26	2.4	1.2	0.8	Tolerate ambiguity in resolving ethical conflicts
-2.43	0.92	-0.8	0.75	-0.9	Demonstrate professional demeanor in behavior, appearance, and communication
-2.59	1.11	1	1.33	1.2	Recognize the extent to which a culture's structures and values may oppress, marginalize, alienate

Easiest to rate as Advanced