

# Thoughts about O\*NET

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# My History with O\*NET – Full Disclosure

- Past publishing on/with O\*NET
  - Published on O\*NET
    - Champion, Morgeson, & Mayfield (1999); Peterson et al. (2001)
  - Published using O\*NET
    - Dierdorff & Morgeson (in press, 2007); Dierdorff, Rubin, & Morgeson (in press); Morgeson & Humphrey (2006); Shin, Morgeson, & Champion (2007)
  - Written about O\*NET and other job analysis topics
    - Brannick, Levine, & Morgeson (2007); Morgeson & Champion (1997, 2000); Morgeson, Delaney-Klinger, Mayfield, Ferrara, & Champion (2004); Morgeson & Dierdorff (in press)
- Used O\*NET in applied/consulting projects
- My overall view of O\*NET

# My Focus Today

- Scientific standing of O\*NET
  - All uses of data depend on underlying quality of data
- What are the limitations/major questions?
- What else needs to be done?
- Some suggestions on how to get there

# Some Strengths of O\*NET

- Common language
- Comprehensiveness
- Taxonomic structure of content domains
- Thoroughness/care in design, development, data collection
- Accessibility of occupational database
- But, there are some questions...

# Question #1: Accuracy

- How accurate is the data that has been collected?
- What is truth in job analysis?
  - True score model
  - Sources of variance model
  - Consequential validity model
  - Validity of inferences model

# Question #1: Accuracy

- Numerous potential sources of inaccuracy
  - Social, cognitive, individual differences
  - Different effects on job analysis data
    - Reliability, agreement, discriminability, dimensionality, mean ratings, completeness
  - Different sources have different problems
    - Example: Incumbents and impression management
    - Example: Analysts and categorization

Conclusion: O\*NET appears to be affected by some of these problems

## Question #2: Levels of Analysis

- Is O\*NET at the appropriate level of analysis?
- Job vs. occupation
  - Job is potentially narrower than occupation
  - Surveys refer to the “job” but inferences made about “occupation”...
- Number of jobs and occupations
  - DOT: 12,000+ “jobs”
  - O\*NET: Under 1,000 “occupations”

## Question #2: Levels of Analysis

- Do all of the content domains “make sense” at the occupational level of analysis?
- Some very clearly reflect the occupational environment
  - GWAs, skills
- Others, less clear
  - Work styles (individual), some work context (organizational)

## Question #3: Domain Redundancy

- How much redundancy is there between and within content domains?
- Some domains appear to have considerable construct overlap with other domains
  - Example: Skills and abilities
  - What are the intercorrelations across domains?
- Redundancy within a domain
  - Empirical validation of the taxonomic structure
  - Many domains are likely far simpler than content model would suggest...

## Question #4: Rating Scales

- Relevance of level and importance scales?
- Is level the most relevant scale?
  - How would one use this information?
- Redundancy in scales?
  - Level and importance highly correlated
- Missing important aspects?
  - Frequency
  - Consequence of error
  - Needed at entry

## Question #6: Where's the Research

- O\*NET significant, comprehensive, highly successful “product”
  - Lots of opinions...but little published, peer-reviewed empirical research
- Essential to understand strengths/weaknesses
  - Usefulness of system dependent on purpose
  - Research can tell what purposes are most appropriate/justified
  - Research can suggest refinements/limitations
  - Other major job analysis systems benefited from years of research (e.g., DOT, PAQ)

## Question #6: Where's the Research

- Essential for transparency
  - Make individual level incumbent data available
- Two kinds of research
  - O\*NET as a system
  - O\*NET as a minor “player”
- What can be done?
  - Make data available for dissertations
  - Offer scholarships for doctoral research on O\*NET
  - Grants for independent research on O\*NET
  - Time for another “blue book”?  
(i.e., Peterson, Mumford, Borman, Jeanneret, & Fleishman, 1999)

# The End

- Thanks for listening!