





Job Analysis vs. Competency Modeling in Credentialing: *An Interactive Panel Discussion*

John Weiner, PSI Services LLC

Chad Buckendahl, ACS Ventures, LLC

Anjali Weber, Board of Pharmacy Specialties

Grady Barnhill, National Commission on Certification of Physician Assistants

Agenda



- Panel Introductions & Perspectives
- Background
- 4 Focal Questions
- Discussion



Panel Introductions

- John Weiner Psychometric consulting, Test publisher, Credentialing, I/O psychology
- Chad Buckendahl Psychometric consulting, Credentialing, Education
- Anjali Weber Examination Director, Credentialing organization
- Grad Barnhill Interim Test Development Director, Credentialing organization



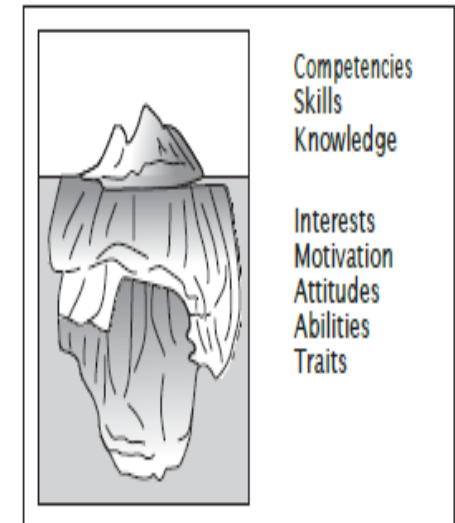
Background

Let's begin with these working definitions...

- **Job Analysis (JA)** – a class of methods used to identify **tasks** or work activities performed and the knowledge, skills, abilities, and other characteristics (**KSAOs**) required for successful performance in a job.
- **Competency Modeling (CM)** – a class of methods used to identify important competencies for a job, occupation, or organization.

What is a competency?

- KSAO
- Level of performance
- Differentiates High/Low





Background

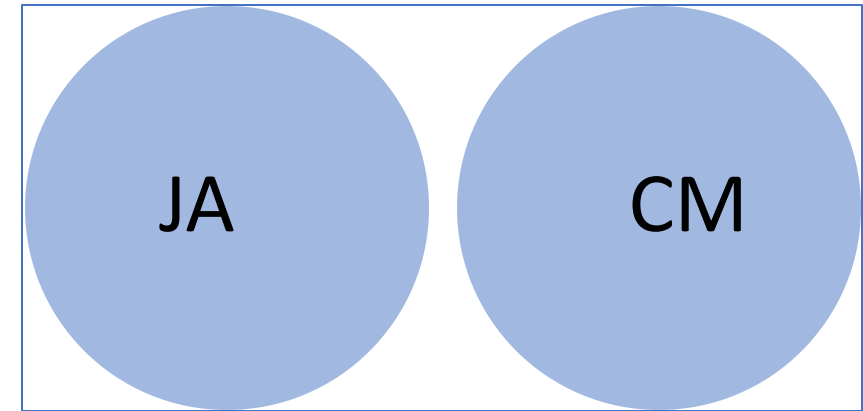
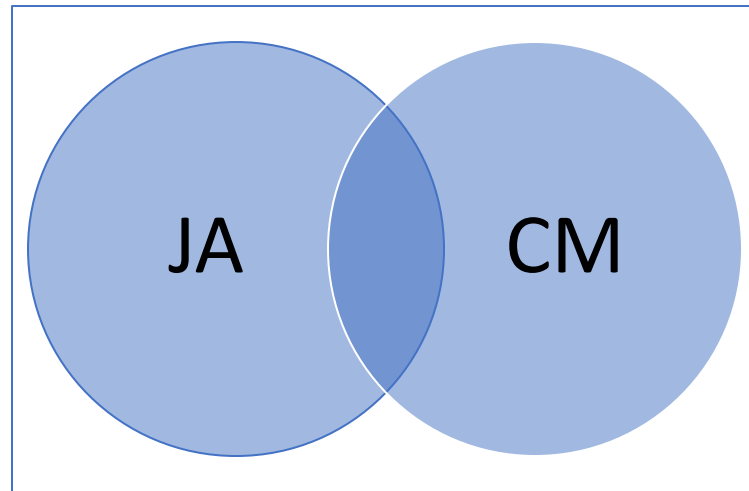
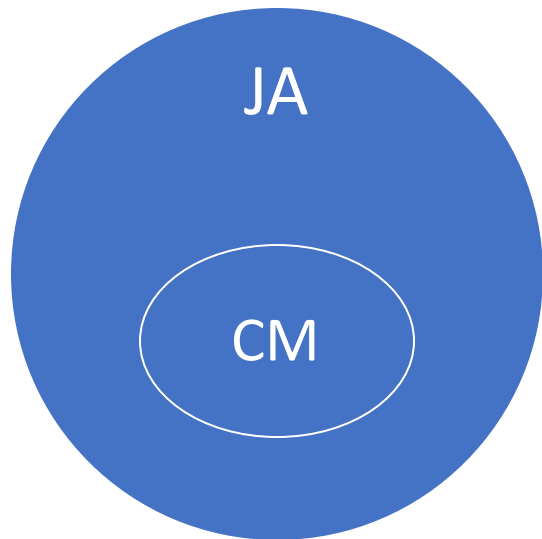
A Quick Example

- Sphere 2: Communications
- **Competency**: 2.1 Utilizes appropriate communication methods and skills to meet the needs of various audiences.
- **Performance Indicator**: 2.1.2 Identifies barriers to effective communication.
- **Practice Illustrations**:
 - Identifies language barriers.
 - Uses the services of an interpreter when appropriate.
 - Considers the readability of print materials and literacy level of the audience.



Background

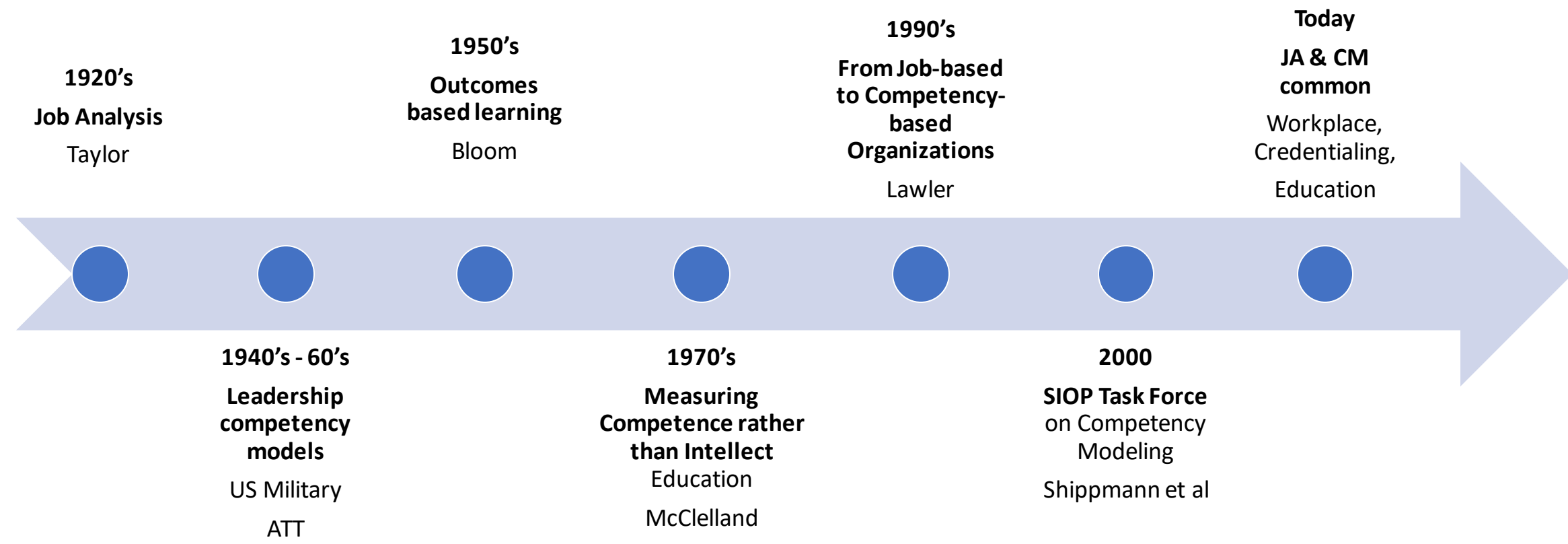
Depending upon one's point of view...





Background

How did JA and CM evolve?





Background

Why is this topic important?

- **Confusion among practitioners:** terminology, methods, application – when, why.
- “Competency” associated with a vast **range of applications** takes on **different meanings**.





Panel Questions

1. *What is your experience in JA and CM? How have you used them? (all)*
2. *When is JA or CM more appropriate? What are the considerations? (CB, JW)*
3. *What are the unresolved issues in the use of JA vs. CM? (JW, CB)*
4. *What are the opportunities for application of these approaches to credentialing (GB, AJ)*



What is your experience in JA and CM? How have you used them?

Chad: JA and CM Experience



- Applied JA and CM in education, credentialing, and employment
- JA: Task Inventories, Integrated Task Statements, KSAJs for professional licensure and certification programs
- CM: Competencies for professional training programs and practice

John: JA and CM Experience



- Applications in employment, licensure, certification, training and development
- JA to support test design, objectives-based learning, content validation, performance metrics
 - Hundreds of studies over 30 years: task analysis, KSAOs, critical incidents
 - Support a range of assessments: knowledge, cognitive, personality, physical, SJT, sims
- CM to support organizational-talent programs, talent development, performance management
 - Increasing use in past decade
 - Behavioral assessment, simulations, performance-based testing, competency-oriented assessment reports, organizational/professional alignment

Grady: JA and CM Experience



- Used JTAs for 30+ years.
 - Typical Job Task Analyses, Practice Analyses, Role Delineation Studies
 - Quick to discard that which is “not measurable”
- Competencies:
 - Physician Assistants: 6 Competencies for physician assistants:
 - 1) Medical Knowledge, 2) Interpersonal & Communications Skills, 3) Patient Care, 4) Professionalism, 5) Practice-based Learning & Improvement, 6) Systems-based Practice

Grady: JA and CM Experience



- Competencies Experience:
- CDR:
 - Core Essential Practice Competencies for registered dietitian/nutritionist
 - Functional Essential Practice Competencies
 - Used as part of a Portfolio system for recertification
 - Used as a basis for curriculum by educators
 - Used by professional development providers to interface with recertification system
 - Inter-organizational opportunities

Anjali: JA and CM Experience



- Used JAs for 20+ years.
 - Peer-developed KSAs, industry standards, job descriptions.
- CM: Auditor certification (ISO 19011 guidelines for auditors)
 - Knowledge test (written)
 - Personality assessment
 - Skills assessment
- Current: competencies from residency standards as resource



When is JA or CM more appropriate? What are the considerations?

Considerations for using JA vs. CM



- Claims being made about candidates
 - Current or future focus
 - Cognitive complexity
- Bottom up or top down
- Minimal competence or optimal performance
- Would perform or should perform

Considerations for using JA vs. CM



Consideration	JA	CM
Purpose	Detailed information to support <ul style="list-style-type: none"> • Test development • Learning objectives • Content validation 	Integrated information to support <ul style="list-style-type: none"> • Behavioral assessment • Development • Performance management • Alignment with strategy, framework
Outputs	<ul style="list-style-type: none"> • Technical report • Test blueprints • Knowledge domains 	<ul style="list-style-type: none"> • Competency model • Competency library • Performance levels, requirements
Consumers	<ul style="list-style-type: none"> • Test Developers, Psychometricians • Program administrators • Instructional designers, educators • Enforcement agencies, lawyers 	<ul style="list-style-type: none"> • Leadership • Test Developers, Psychometricians • Program Administrators • Educators, Trainers, Coaches • Candidates, employees



***What are the unresolved
issues in the use of JA vs.
CM?***



Unresolved Issues

- Need for evidence-based guidance for credentialing practitioners
 - Effectiveness and value of CM vs JA for different applications?
 - CM methods not standard; what info should be generated, how, by whom?
 - Shelf-life of CM same as JA?
 - Reliability – JA tends to be more rigorous than CM
 - Generalizability – do competency models apply across organizations?
- Legal defensibility of CM?
 - Uniform Guidelines focus on rigorous data collection and documentation



Unresolved Issues

- Specificity of competency statements
 - Guidance for content development
 - Representation of the breadth and depth of the domain
- Credential or employment/selection purpose
- Minimal competence vs. maximal performance



***What are the opportunities
for application of these
approaches to credentialing?***

Opportunities for application to credentialing



- MOC requirements
- Example:
 - ABMS: Six Core Competencies
 - Relevance
 - Alignment with professional expectations
 - Quality practice



Opportunities – cont'd

- For education providers: guides curricula
- Employers and consumers – value of hiring certificant
- Practitioners
 - Self-assessment
 - Individual learning plans
- Competitive advantage
- Inclusion of evolving competencies – future success

CM Opportunities -



- Creation of exam blueprint
- Core curriculum education
- Capstone course or project
- Work experience evaluation

Opportunities for application to credentialing



- Education Curriculum informed by Essential Practice Competencies – Dream Wizard
- Competency-based Learning Plan for recertification – Goal Wizard
- Competencies for CE providers
- CDR: Core Essential Practice Competencies for registered dietitian/nutritionist:
 - Sphere 1: Ethics and Professionalism
 - Sphere 2: Communications
 - Sphere 3: Leadership and Advocacy
 - Sphere 4: Critical Thinking and Decision Making
 - Sphere 5: Informatics
 - Sphere 6: Research, Evidence-Informed Practice and Quality Improvement
 - Sphere 7: Safety and Risk Management
 - Sphere 8: Food, Nutrition and Dietetics and Physical Activity
 - Sphere 9: Education and Counseling

Tools to Support or Document Development of Competencies



- Attestations
- Behavior-based Questionnaire
- 360/Multi-source Feedback
- Sim Coach
- Virtual Standardized Patients
- Academic Coursework
- MOOCs
- Case Presentations
- Certificates/Certifications
- Conference Exhibits
- Experiential Skill Development
- Interactive Workshops
- Journal Clubs/Study Groups
- Lectures/Webinars
- Conference Posters
- Professional Leadership/Precepting
- Professional Reading for Authors
- Research
- Residency/Fellowships
- Sponsored Independent Learning
- Self-study audio, computer, print, video, web materials



Discussion

- How could programs incorporate soft skills into competency modeling? What are the risks?
- What differences, if any, are there between mandatory and voluntary credentials in using job analysis or competency modeling?



References

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Thank you!

John Weiner

jweiner@psionline.com

Chad Buckendahl

cbuckendahl@acsventures.com

Anjali Weber

aweber@aphanet.org

Grady Barnhill

gradyb@nccpa.net

