

Assessment Centers as Tests

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Paper presented at the International Congress on Assessment Centers

October 16, 2002, Pittsburgh, PA

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Agenda

- Purpose
 - Discuss Designing and Evaluating Assessment Centers Like More Traditional Tests
- Process
 - Discuss Logic of the Approach
 - Discuss Study
 - Group Discussion



Agenda (Continued)

- Payoff
 - Insight into designing assessment centers that produce accurate, useful results



The Current State of Affairs

- Assessment center literature review:
 - Behaviors are virtually always observed but seldom explicitly measured
 - Studies on construct-related validity have not looked at behavioral ratings
 - Professionally accepted standards for test development are not applied to assessment centers



Current State of Affairs: Implications

- No systematic way to know what dimensions the AC is measuring
- People may be giving feedback, labeling people, and designing development programs based on inaccurate data
- Behaviors are the “test items” of ACs and there is no way to tell how items are performing from a psychometric perspective without analyzing the behaviors themselves



Desired State of Affairs – Our View

- Assessment centers are complex tests of performance and should be treated like tests in development
- Same professionally accepted standards for test development should be applied to assessment centers



Outcome of More Desired Approach

- Could better identify underlying dimensionality
- Would help to ensure that feedback and labels are accurate
- Would help to ensure that money spent on development programs is not wasted
- Could better identify the psychometric properties of individual behaviors (e.g., item difficulty, discrimination)



Method

Participants: 319 candidates applying for a sales manager position

Assessment Center Exercises

- Coaching Meeting
- Problem Analysis
- In-Basket



Method (Continued) Dimensions

- Analytical Thinking
- Problem Solving
- Coaching
- Planning/Time Management
- Flexibility
- Interpersonal Skills
- Oral Communication
- Written Communication



Method (Continued)

Example Dimension: Oral Communication

Example Behaviors:

- Speaks at an appropriate volume
- Speaks at an appropriate pace
- Enunciates clearly
- Maintains a logical sequence of thought during discussions
- Presents information in a concise, yet unambiguous manner



Method (Continued)

Behaviors: Behaviors were rated on a 7 point scale from 1 “unacceptable” to 7 “outstanding.”



Construct-Related Validity: Case 1

Dimensions Correlating Highly with Like Dimensions and Low with Unlike Dimensions

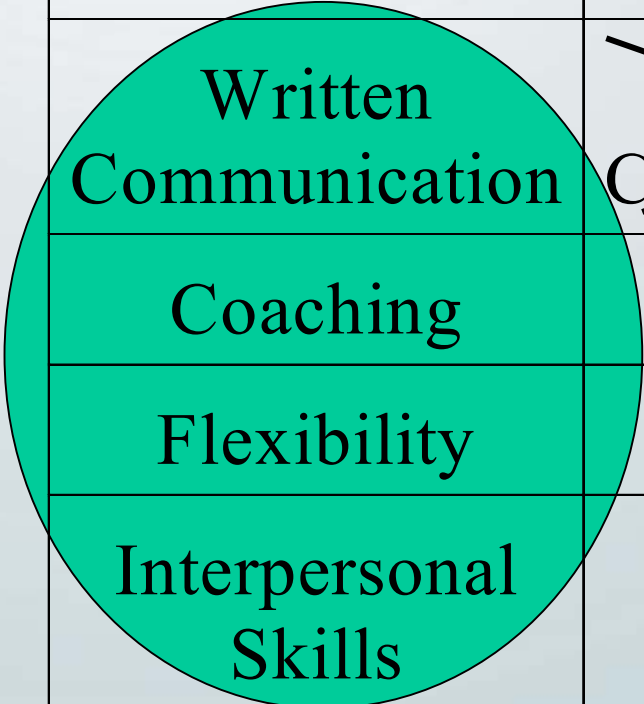
Coaching	Problem Analysis	In-Basket
Written Communication	Written Communication	Written Communication
Coaching	Coaching	Coaching
Flexibility	Flexibility	Flexibility
Interpersonal Skills	Interpersonal Skills	Interpersonal Skills



Construct-Related Validity: Case 2

Dimensions Correlating Highly with Unlike Dimensions and Low with Like Dimensions

Coaching	Problem Analysis	In-Basket
Written Communication	Written Communication	Written Communication
Coaching	Coaching	Coaching
Flexibility	Flexibility	Flexibility
Interpersonal Skills	Interpersonal Skills	Interpersonal Skills





Results for Dimension Analyses

- PCA and MTMM analysis of dimension scores yielded exercise effects
 - Dimensions tended to group together by exercise rather than by dimension
 - It appeared that assessors were not distinguishing among the different dimensions within the exercises



Results for Within Exercise PCAs of Behaviors

- PCAs of the behaviors in each exercise yielded either 5 or 6 dimensions



Dimensions Measured in Coaching Simulation

EXPECTED

1. Analytical Thinking
2. Problem Solving
3. Coaching
4. Oral Communication
5. Interpersonal Skills
6. Planning/Time Management
7. Flexibility
8. Written Communication

ACTUAL

1. AT, PS, PTM
(Analysis/Problem Solving)
2. IS, Coaching
(Supporting/Motivating)
3. OC, PTM (Organized
Communication)
4. OC (Oral Communication)
5. PS, PTM (Scheduling and
Follow-up)



Dimensions Measured in Problem Analysis Simulation

EXPECTED

1. Analytical Thinking
2. Problem Solving
3. Oral Communication
4. Interpersonal Skills
5. Planning/Time Management
6. Flexibility
7. Written Communication

ACTUAL

1. AT, PS, PTM
(Analysis/Problem Solving)
2. OC (Oral Communication)
3. OC, PTM (Organized
Communication)
4. IS (Interpersonal Awareness)
5. IS (Meeting Etiquette)
6. WC (Writing Clearly)



Dimensions Measured in In-Basket

EXPECTED

1. Analytical Thinking
2. Problem Solving
3. Oral Communication
4. Interpersonal Skills
5. Planning/Time Management
6. Flexibility
7. Written Communication

ACTUAL

1. AT, PS, PTM
(Analysis/Problem Solving)
2. OC (Oral Communication)
3. OC, PTM (Organized
Communication)
4. IS (Writing Politely)
5. PS, PTM (Scheduling and
Follow-up)



Discussion: Behaviors As the Unit of Analysis

- By directly analyzing the behaviors, we discovered that the behaviors that defined the actual dimensions did not group together in the way that the assessment center designers intended.



Discussion (continued)

- Any attempt to find construct-related validity using the original dimension scores would be doomed to failure because each dimension contained behaviors that empirically represented different dimensions.
- Without an analysis of the actual behaviors, this would be impossible to uncover.



Implications

- Assessment centers are tests and should be developed by applying the same rigor and professional standards applied when developing other types of tests.
- Behaviors should be measured, not simply observed. Behaviors are the “test items” of assessment centers.



Implications (Continued)

- Lack of construct-related validity may be due to an incorrect *a priori* categorization of behaviors into dimensions by assessment center designers. This can only be uncovered by an analysis of behaviors.
- Basing organizational and individual interventions on assessment center dimension data is inappropriate without knowledge of the construct-related validity of the center.



Implications (Continued)

- Assessment center stimuli should be designed at the behavioral level, rather than only competency level.
- When the construct-related validity of the AC is unknown, feedback on dimensions is inappropriate. Feedback should be given on behaviors and rationally defined themes among the behaviors.



Plans Going Forward

- Continued focus on behavioral measurement.
- Continued focus on behavioral level analysis (e.g., item analysis and review).



Potential Practical Limitations

- Meeting Client Deadlines
- Meeting Client Budgets

Questions and Comments

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