Transparency of Assessment Centers: Lower Criterion-Related Validity but Greater Opportunity to Perform?

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Imagine you and your team construct and implement ACs for selecting consultants. When planning the AC in detail, your team members propose two alternative solutions.
Benchmark for ACs

Criterion-related validity

= How well does AC performance predict job performance?
Two observations

1. Criterion-related validity has decreased over time
   - AT&T Study 1966 (Bray & Grant) \( r = 0.46 \)
   - Meta-analyses 1987 (Gaugler et al.) \( \rho = 0.37 \)
   - 2007 (Hermelin et al.) \( \rho = 0.28 \)
   - 2007 (Hardison & Sackett) \( \rho = 0.26 \)

2. Dimension transparency has increased
   - Transparency 1997 (Spychalski et al.) 29%
   - 2009 (Thornton & Krause) 43%

Starting point for this study on the practically relevant effects of dimension transparency
Purpose of the study

What effects does dimension transparency have…

1) on the criterion-related validity?
2) on the relation of assesses’s behavior and job performance?
3) on assesses’s opportunity to perform?

→ Practical implications for future construction of ACs
ACs differ with regard to dimension transparency (Krause & Gebert, 2003)

- **nontransparent**: no information about assessed dimensions
- **transparent**: detailed information about assessed dimensions for assesses before each exercise

**Continuum**
Controversial assumptions concerning the effects of transparency on criterion-related validity:

- **Positive effect**
  
  Transparency levels chances.
  
  (Dodd, 1977; Maurer et al., 2008)

- **Negative effect**
  
  Transparency lowers the similarity of selection and job situation.
  
  (Klehe et al. 2008; Kleinmann, 1997; Smith-Jentsch, 2007)
Position 1: Positive effect on CRV

clear view for everyone of what is important for performance → levels chances for performing well
Position 2: Negative effect on CRV

On the job:

Employees usually do not know according to which criteria their performance will be evaluated in the next situation.

In the AC:

a) nontransparent AC: assessees do not know according to which criteria their performance will be evaluated

b) transparent AC: assessees know according to which criteria their performance will be evaluated
Cognitive affective personality system theory (CAPS, Mischel & Shoda, 1995)

interaction of the person and the situation

affective and cognitive representation

behavioral scripts

behavior
Position 2: Negative effect on CRV

Nigel in the **nontransparent** AC:

What is important for my performance?
What is crucial for achieving the best outcome?

Tom in the **transparent** AC:

Assertiveness, structurizing behavior and persuasion are important for my performance.

Nigel and Tom on the job:

What is important for my performance?
What is crucial for achieving the best outcome?
Excursion to research on ATIC

ATIC = ability to identify criteria in selection settings  
(cf. Kleinmann et al., 2011 for an overview)

- Assessees differ with regard to their ability to identify evaluation criteria in (nontransparent) selection settings (e.g., Kleinmann, 1993)

- Assessees’ ATIC predicts their selection performance and supervisors’ job performance ratings (e.g., Jansen et al. 2013, Ingold et al., in press)

- Making evaluation criteria transparent makes this criterion-relevant ability irrelevant → lower criterion-related validity
## Excursion to research on ATIC II

<table>
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<tr>
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<th>Interview performance</th>
<th>AC performance</th>
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<td>Melchers, Kleinmann, Richter, König, and Klehe (2004)</td>
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<td>Preckel and Schüpbach (2005)</td>
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(Table adapted from Jansen et al. 2013)
Research on dimension transparency in ACs I

Kleinmann (1997):

- Performance in nontransparent AC
- Performance in transparent AC
- Performance in 2nd nontransparent AC
Research on dimension transparency in ACs II

Smith Jentsch et al., (2001):

directiveness ratings in nontransparent condition

directiveness ratings in transparent condition

self-reported directiveness
Hypothesis 1

Ratings from a nontransparent AC (i.e., without detailed information for assesses about the targeted dimensions) are more criterion valid than ratings from a transparent AC (i.e., with detailed information).
Life is a stage …
Work is a stage.
ACs are a stage.
Assessees' behavior in ACs

Assessees in ACs use impression management

- Impression Management
  - Assertive Impression Management
    - Self-promotion
  - Defensive Impression Management
    - Ingratiation
    - Excuses
    - Justification

→ positive effect on AC performance possible (Klehe, Kleinmann, Niess, & Grazi, 2014; McFarland et al., 2003, 2005)
Controversy exists as to how impression management affects the selection decision

a) negative: Impression management biases selection decisions (e.g., Anderson, 1991; McFarland, Ryan, & Kriska, 2002)

b) positive: Impression management shown in selection settings beneficial for the job (e.g., Ellis et al., 2002; Kleinmann & Klehe, 2011)
Impression management on the job

Making a Great First Impression
Getting off to a Good Start

It takes just a quick glance, maybe three seconds, for someone to evaluate you when you meet for the first time. In this short time, the other person forms an opinion about you based on your appearance, your body language, your demeanor, your mannerisms, and how you are dressed.

With every new encounter, you are evaluated and yet another person’s impression of you is formed. These first impressions can be nearly impossible to reverse or undo, making those first encounters extremely important, for they set the tone for all the relationships that follows.

So, whether they are in your career or social life, it’s important to know how to create a
Transparency, self-promotion and job performance

- transparent ACs: allow assesses to adapt their self-promotion to the dimensions
- nontransparent ACs: no dimension information available for assesses that allows adaptation
- on the job: employees do not have information to adapt their self promotion accordingly

- Typical self-promotion in nontransparent ACs
- Atypical self-promotion in transparent ACs
Hypothesis 2

Assessees’ self-promotion in the nontransparent condition will be more positively related to supervisor-rated job performance than assessees' self-promotion in the transparent condition.
Fairness perceptions of assessees

- Assessees’ fairness perceptions important for selection procedure implementation (König et al., 2010; Eurich et al., 2009)

- Central component of fairness perceptions: opportunity to perform (OTP, Schleicher et al., 2006)

- OTP = perception that s/he has an adequate opportunity to demonstrate one’s knowledge, skills, and abilities in the testing situation (Arvey & Sackett, 1993, Bauer et al., 2001, Gilliland, 1993)
Dimension 1
Dimension 2
Dimension 3
Hypothesis 3

Assessees’ perceived opportunity to perform is higher in the transparent condition than in the nontransparent condition.
Method
Considerations when planning the study

Design that allows for conclusions on the effects of transparency

- manipulation of transparency
- full control over ACs (i.e. conditions identical except for transparency manipulation)

→ Simulated ACs with a between-subjects design

Sample with supervisors

- collecting criterion data from participants’ supervisors → employed participants who permitted us to contact their supervisors
- sample representative for ACs → newcomers with some job experience as target group
Simulated ACs für employed graduates who are looking for a new job

- one-day AC with several exercises and trained assessors
- extensive feedback on performance
Assesees

- 106 male, 91 female, mean age ≈ 29 years
- worked in several branches, e.g.,
  - 40% research and education sector
  - 9% in the banking and insurance sector
  - 7% in the industrial sector
  - 6% in the service sector
  - 6% in the media and communication sector
  - 5% in the public sector

Assessors

- mean age ≈ 25 years
- one-day FOR-training

Supervisors

- mean age ≈ 46 years old
- ≈ 5 years in supervisory function
Between-Subjects-Design

Assessees take part in one of two conditions:

- nontransparent AC
- transparent AC

AC identical except for transparency manipulation

- no information about assessed dimensions
- detailed information about assessed dimensions
Example information about dimensions

Dimensions measured

1) Organizing & planning

Behavioral examples:
- proceed systematically and in a structured manner
- order information in a nuanced and comprehensive manner
- establish a clear, simple and adequate structure
- follow a common thread
- subdivide discussions and presentations
- correct themselves and others when deviating from the agreed procedure
- comply with time requirements

2) Persuasion

Behavioral examples:
- put forth vivid, concrete and nuanced arguments
- argue coherently
Procedure: Data from 3 sources

All sources blind for the two conditions

Assessees
- fill in measures:
  - self-promotion
  - opportunity to perform
  - cognitive ability test
  - manipulation check
  - sociodemographic variables

Trained assessors
- evaluate assessees’ performance in AC exercises on a scale from 1 to 5 on every dimension.

Supervisors
- fill in a confidential online survey:
  - employees’ task-based performance
  - sociodemographic variables
Preliminary analysis I

A. Manipulation check: Higher sum scores in the transparent condition than in the nontransparent condition.

\[ M = 6.77, \ SD = 1.40 \]

\[ M = 8.95, \ SD = 1.76 \]

\[ t(173.44) = 9.43, \ p < .001, \ d = 1.37 \]
Preliminary analysis II

B. Comparable samples

Sample in nontransparent ACs

Sample in transparent ACs

Both samples comparable with regard to:

- age
- sex
- cognitive ability
- number of working hours
- work experience
- job performance ratings
- how well supervisors could evaluate their employees’ performance

all $ts < 1.31$, all $ps > .19$
Hypothesis 1

Ratings from a nontransparent AC (i.e., without detailed information for assesses about the targeted dimensions) are more criterion valid than ratings from a transparent AC (i.e., with detailed information).

<table>
<thead>
<tr>
<th></th>
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<th>Nontransparent</th>
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<tbody>
<tr>
<td>Analytical skills</td>
<td>.04</td>
<td>.29**</td>
</tr>
<tr>
<td>Organizing &amp; planning</td>
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<td>.18†</td>
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<tr>
<td>Consideration of others</td>
<td>.09</td>
<td>.14</td>
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<tr>
<td>Persuasion</td>
<td>-.01</td>
<td>.18†</td>
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<td>Presentation skills</td>
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<td>.18†</td>
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<tr>
<td>Mean validity</td>
<td>.09</td>
<td>.20</td>
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</tbody>
</table>

$t(8) = 3.84^{**}, p < 0.01$
Hypothesis 2

Assessees’ self-promotion in the nontransparent condition will be more positively related to supervisor-rated job performance than assessees' self-promotion in the transparent condition.

\[
\begin{align*}
\text{self-promotion} & \quad r = -0.20 \quad \text{transparency} \\
\text{self-promotion} & \quad r = 0.17 \quad \text{nontransparency}
\end{align*}
\]

\[
(Z = 2.46^{**}, p < 0.01)
\]
Hypothesis 2

*Figure 2.* Interaction diagram of transparency as moderator of the relation of candidates’ self-promotion in the assessment center and supervisor-rated task-based job performance.
Hypothesis 3

Assessees’ perceived opportunity to perform is higher in the transparent condition than in the nontransparent condition.

\[ t(192) = 1.02, \text{n.s.} \]

\begin{align*}
\text{transparent} & : M = 3.30 \\
\text{nontransparent} & : M = 3.26
\end{align*}
Discussion

Dimension transparency had

1) negative effects for the criterion-related validity of the AC, as the ratings from a nontransparent AC were more criterion valid than the ratings from a transparent AC

2) moderated the relation of self-promotion and supervisor’s ratings of job performance

3) no effect on the assessees’ perception of their opportunity to perform
Limitations

- data collection in a simulated setting and not in an operational AC, but
  - representative sample
  - full control over AC and manipulation
  - authentic setting
  - criterion data from supervisors
Implications for practice

- refrain from making dimensions transparent in selection contexts
- generally pay attention to design factors in ACs → continuous evaluation of ACs recommendable
- effect of impression management on job performance depends on the situation → interactionist perspective necessary
Future research

- more primary research with field data and varying degrees of transparency
- meta-analysis on effects of transparency on criterion-related validity
- linking IM research in the selection context to IM research in the work context
Thank you for your attention

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and thanks to my co-authors

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Cornelius König
Klaus Melchers

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Selected references


## Descriptive Statistics and Intercorrelations of Study Variables in the Nontransparent and Transparent Condition

<table>
<thead>
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<th>Variables</th>
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<th>2</th>
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<th>8</th>
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<tr>
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**Note.** Intercorrelations for the nontransparent condition are presented below the diagonal, and intercorrelations from the transparent condition are presented above the diagonal. For the nontransparent condition N = 103 with the exception of job performance for which N = 92 and for age for which N = 98. For the transparent condition N = 94 with the exception of job performance for which N = 87 and for age for which N = 91. Sex was coded as 1 = male, 2 = female. AC = Assessment center. 

†p < .10, *p < .05, **p < .01, two-tailed.
### AC-exercise-dimension-matrix

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Presentation 1</th>
<th>Presentation 2</th>
<th>Group discussion 1</th>
<th>Group discussion 2</th>
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<tr>
<td>Presentation skills</td>
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