THE 42ND INTERNATIONAL CONGRESS ON ASSESSMENT CENTER METHODS AND DEVELOPING LEADERSHIP TALENT
Assessment Centres: A Conceptual Review

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Work and Organisational Psychology
The core of the Assessment Center is its interactive nature

An AC is a standardised assessment process where one or more participants complete multiple behavioural simulation exercises and are observed by multiple assessors who are trained to observe and evaluate each participant against a number of predetermined, job-related behavioural constructs known as competencies (Schlebusch & Roodt, 2008).
The core of the Assessment Center is its interactive nature

An AC is a standardised assessment process where one or more participants complete multiple behavioural simulation exercises and are observed by multiple assessors who are trained to observe and evaluate each participant against a number of predetermined, job-related behavioural constructs known as competencies (Schlebusch & Roodt, 2008).

AC are COMPLEX and INTERACTIVE
Assessment Centres: A Conceptual Review

PUBLICATIONS

- Assessors ca. 10
- Assessees ca. 20
- AC Situation ca. 20

TIME FOR A REVIEW!
Assessment Centres: A Conceptual Review

Role and interplay
- Assessors
- Asseesses
- Assessment centre design

Assessment centres
- Technology
- Cross-cultural applications
Assessors: Challenging tasks

- Observation and evaluation: cognitively demanding
- Time limitation: additional pressure
- Interaction: No prior informal contact
Assessor rating model: How should assessors evaluate their impressions

Factors contributing to the accuracy of judgments

- Relevance
- Availability
- Detection
- Utilization

Assessors’ schemes
Assessors’ perceptiveness
Assessors’ access
Assessees’ behaviour

Judgment processes
Judgment outcomes

rationale
AC rating

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Assessors: Challenging tasks

- **Relevance**
  Assessees can express trait-relevant behaviour.

- **Availability**
  Assessors can perceive this trait relevant behaviour.

- **Detection**
  Assessors need to notice the trait-relevant behaviour.

- **Utilization**
  Assessors have to interpret the perceived trait-relevant information correctly.
Assessor training

- Frame-of-reference trainings (FOR) establish shared categorization schemata for dimensions.
- Such trainings should influence how raters encode, represent, organize, and recall information.
- FOR trainings have a medium effect size of $d = .50$ across different operationalizations of accuracy (Roch et al., 2012).
- The majority of these studies (29 out of 36, i.e., 80%) examined effects in a performance appraisal context.
Dual process theories (e.g., Kahneman & Frederick 2002, Stanovich & West 2000)

Judgment processes

- Process 1
- Process 2

Judgment outcomes

- Initial impression
- AC rating
Dual process theories (e.g., Kahneman & Frederick 2002, Stanovich & West 2000)

Judgment processes

- intuitive
- rationale

Judgment outcomes

- Initial impression
- AC rating
Central questions

What role does the first impression of assesses play in assessment centres?

What factors influence first impressions?

Do first impressions provide relevant and accurate information or do they distort perceptions?
First impressions in the assessment centre (Ingold et al. 2018)

Potential impact factors
- Physical attractiveness
- Sympathy
- Personality

First impressions of assesses

Assessment Centre ratings
- AC-rating on dimension 1
- AC-rating on dimension 2
- AC-rating on dimension 3

Job performance ratings
- Job performance

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What role does the first impression of assesses play for assessment centre success?

Impact of first impressions on AC-rating (Ingold et al., 2018) $r = .49$

- First impression: 24%
- AC-rating on dimension 1: 76%
What factors influence the assesseee’s first impression?

- Conscientiousness
- Emotional stability
- Physical attractiveness
- Liking

Impact of first impressions on first impression (Ingold et al., 2018)
What factors influence the assessees’s first impression?

- Conscientiousness
- Emotional stability
- Physical attractiveness
- Liking

Impact of first impressions on first impression (Ingold et al., 2018)

- Conscientiousness: 84%
- Emotional stability: 7%
- Physical attractiveness: 9%
- Liking: 7%
Does the first impression convey relevant and accurate information about the assessee?

- Personality
- First impression
- AC-rating
- Job performance

(+) not significant
Assessor rating model: How do and how should assessors evaluate their impressions?

Factors contributing to the accuracy of judgments:
- Relevance
- Availability
- Detection
- Utilization

Judgment processes:
- Intuitive
- Rationale

Judgment outcomes:
- Initial impression
- AC rating

Assessees’ behaviour
Assessors’ access
Assessors’ perceptiveness
Assessors’ schemes

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Conclusions

- First impressions affect assessment centre ratings (and interview ratings)
- First impressions can provide relevant information (e.g., about the personality of the candidate)
- First impressions should be consciously noticed and noted.
- More diversified and shorter exercise could be an alternative to a few long-lasting exercises.
Assessee performance model

Knowledge, skills, abilities, and other characteristics

Ability to identify criteria

Impression management

Performance

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Assessee attributes

Assessee’s attributes (e.g., their cognitive ability, personality) are relevant for performing well.

- **Cognitive ability** is linked with AC dimension ratings from $\rho = .10$ for consideration and drive to $\rho = .32$ for problem solving (Sackett et al., 2017).

- **Big Five** self reports relate to AC dimensions ratings from $\rho = -.01$ to $\rho = .24$ (Meriac et al., 2008).

- **Cognitive ability** is linked to overall exercise ratings from $\rho = .10$ for role-plays to $\rho = .25$ for in-baskets (Hoffman et al., 2015).
Assessees attributes

Arthur et al. (2003): Empirically driven framework
- problem solving
- influencing others
- consideration / awareness of others
- communication
- organizing and planning
- drive

Meta-analytic criterion-related validity:
- problem solving, influencing others, organizing and planning $\rho = .37$ to $.39$
- communication, drive, consideration / awareness of others $\rho = .25$ to $.33$
Assessee performance model

Knowledge, skills, abilities, and other characteristics

Ability to identify criteria

Impression management

Performance
Assessees’ cognitions

- The ability to identify criteria (ATIC) is defined as a person’s ability to correctly perceive performance criteria when participating in a nontransparent evaluation situation (Kleinmann et al. 2011).

- Some assessees
  - are better at reading cues,
  - show more evaluation-relevant behaviours,
  - receive better AC ratings on the targeted dimensions.

- People scoring high on ATIC profit from this ability on the job and receive higher job performance ratings.

- Therefore, ATIC has been seen as contributing to the AC’s validity.
Advice: Your statement is necessary for our research in order to design and improve the Assessment Center exercises. Your answers do **not** affect the evaluation procedure! Therefore, no answer will be considered *right* or *wrong.* You have shown certain behaviours in the former exercise. Perhaps you were wondering what the observers were observing, i.e., **on which dimension they evaluated your behaviour.**

Please write down in short notes the attributes (dimensions) that you think have been evaluated, e.g. *Perseverance* and your behaviour(s) related to these attributes, e.g. *continuous contributions, not giving up easily, constant participation*...

<table>
<thead>
<tr>
<th>Dimension(s)</th>
<th>Behaviours</th>
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<tbody>
<tr>
<td><strong>perseverance</strong></td>
<td><em>continuous contributions</em></td>
</tr>
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<td></td>
<td><em>not giving up easily</em></td>
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<td></td>
<td><em>constant participation</em></td>
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Jansen et al., (2011 HP)
Individual differences in candidates’ ability to identify criteria

– Kleinmann (1993):
## Correlation between correct identification (ATIC) and performance

<table>
<thead>
<tr>
<th>Assessment centre:</th>
<th>Correlation</th>
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<tbody>
<tr>
<td>Kleinmann (1993)</td>
<td>.25* - .44**</td>
</tr>
<tr>
<td>Kleinmann (1997)</td>
<td>.32**</td>
</tr>
<tr>
<td>Preckel &amp; Schüpbach (2005)</td>
<td>.49**</td>
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<td>König et al. (2007)</td>
<td>.39**</td>
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<tr>
<td>Jansen et al. (2013)</td>
<td>.23*</td>
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<td>Christiansen et al. (2014)</td>
<td>.40**</td>
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<th>Structured selection interviews:</th>
<th></th>
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<td>Melchers et al. (2004)</td>
<td>.27*</td>
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<tr>
<td>Melchers et al. (2009)</td>
<td>.35**</td>
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<tr>
<td>Ingold et al. (2015)</td>
<td>.29**</td>
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<tr>
<td>Oostrom et al. (2016)</td>
<td>.33**</td>
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<th>Personality test:</th>
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<td>König et al. (2006)</td>
<td>.23*</td>
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Results from a field study: Jansen, Lievens, Melchers, Kleinmann et al. (2013)

Assessment centre

Job performance

ATIC score

\[ r = 0.21^* \]
\[ (r = 0.17) \]

\[ r = 0.27^{**} \]

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Assessee performance model

- Knowledge, skills, abilities, and other characteristics
- Ability to identify criteria
- Impression management

Performance

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Assessees’ impression management

Generally, assessees provide a particular image to a target audience.

- Assessees receive little information in ACs on which IM behaviours might be effective.

- Assessees have not interacted previously with assessors and lack experience in reading their reactions.
Assessees’ impression management

Current research provides interesting findings.

- Stronger effects in transparent AC condition (Ingold et al., 2016)

- Self-promotion relates to ratings on the leadership and planning dimensions. Ingratiation relates to conceptually related cooperation dimension (Klehe et al., 2014)
Conclusion

- ACs measure administrative skills, relational skills and drive
- Participants try to recognize relevant cues within the exercises
- Participants try to adapt their behaviour
- Specific IM tactics influence ratings of specific dimensions

- Including an ATIC measure might be fruitful to capture facets of social perceptiveness.
Model on the interplay between the AC situation, the assessor, and the assessee

AC situation
- Strength
- Relevance

Assessee
- Cognitive-affective unit
- Activated affective and cognitive representation of the situation

Assessee’s behaviour

AC ratings
Model on the interplay between the AC situation, the assessor, and the assessee

Trait activation theory

Situational strength + trait relevance = Trait activation potential
Model on the interplay between the AC situation, the assessor, and the assessee

TAT and AC research shows that construct-related validity improves when exercises are similar in terms of trait activation potential (Haaland & Christiansen 2002).

Situational bandwidth between the exercises increases criterion-related validity while lowering the convergence of ratings across exercises (Speer et al. 2014).
Model on the interplay between the AC situation, the assessor, and the assessee

Assessors’ accuracy improved when assessors received training familiarizing themselves with role-player prompts (Lievens, et al., 2015)
Model on the interplay between the AC situation, the assessor, and the assessee

Providing assessees a list of dimensions with behavioural examples prior to each AC exercise (transparent AC) reduces criterion-related validity compared to not providing this material (Ingold et al. 2016).

Assessee

Cognitive-affective unit

Activated affective and cognitive representation of the situation

Assessee’s behaviour

AC ratings

Work and Organisational Psychology
Model on the interplay between the AC situation, the assessor, and the assessee

- **Cognitive-affective unit**
- Activated affective and cognitive representation of the situation
- **Assessee’s behaviour**
- **AC ratings**

**AC Situation**
- **Strength**
- **Relevance**

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Conclusion

- Trait activation is important
- Dissimilarity between the exercises increases criterion-related validity

- Create exercises carefully (strength, relevance, prompts)
- Raters‘ accuracy improves when they have information about prompts
## Implications for organizations using ACs

<table>
<thead>
<tr>
<th>Performance and criterion-related validity</th>
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<tbody>
<tr>
<td>AC scores explain additional portions of job performance in comparison to mental ability tests and personality inventories.</td>
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<tr>
<td>ATIC predicts assessee’s performance in ACs and assessee’s job performance and can be used as a predictor of job performance.</td>
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<tr>
<td>Initial assessor impressions influence assessee’s performance ratings. Assessors should be aware of their initial impressions.</td>
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<th>Design and training of assessors</th>
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<td>Dissimilar exercises increase the prediction of broad job performance criteria.</td>
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<tr>
<td>Consistent situational cues activate more comparable behaviours.</td>
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<tr>
<td>Transparency of dimensions reduces criterion-related validity.</td>
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<td>Frame-of-reference training provides improved accuracy.</td>
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<tr>
<td>Embedded situational cues in exercises activate assessee behaviours. These cues should be included in assessor training.</td>
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Research agenda: Technology in ACs

AC guidelines (Rupp et al. 2015, p. 1261), “It has become common practice to leverage information technology within assessment center practice in order to aid efficiency, lower costs, and provide a media-rich experience for assesses.”
Research agenda: Technology in ACs

Research has neglected technology use in ACs - online, video-recorded, virtual. (see Guidry 2017, Ryan et al. 1995 for recent and early exceptions).

REMOTE ASSESSMENTS

VIRTUAL REALITY
Assessor rating model: Technology-based ACs

Judgment processes

- Process 1
- Process 2

Judgment outcomes

- Initial impression
- AC rating

Factors contributing to the accuracy of judgments

- Relevance
- Availability
- Detection
- Utilization

Assessee's behaviour
Assessors' access
Assessors' perceptiveness
Assessors' schemes

online ACs, video-recorded ACs, virtual ACs
Assessee performance model: Technology-based ACs

- Knowledge, skills, abilities, and other characteristics
- Ability to identify criteria
- Impression management
- online ACs, video-recorded ACs, virtual ACs
- Performance

Work and Organisational Psychology
Interplay Model: Technology-based ACs

Assessee's behaviour

Assessee

Cognitive-affective unit

Activated affective and cognitive representation of the situation

AC Situation

Strength

Relevance

Assessee's behaviour

AC ratings

online ACs, video-recorded ACs, virtual ACs

Work and Organisational Psychology
Research Agenda: Technology in ACs

- **Assessors**
  - Are there positive effects on accuracy and interrater reliability?
  - Are there negative effects such as a reduced feeling of responsibility towards assessee?

- **Assessees**
  - What are the effects on assessee's perceptions and behaviours?
  - What is the impact on young digital natives vs. less technically experienced users?

- **AC Situation**
  - What affects the fidelity of technology-aided ACs? How do these factors impact criterion-related validity?
  - How do technology factors influence applicants' perceptions and reactions?
Research Agenda: Cross-cultural issues in ACs (diversity)

AC guidelines (Meiring & Buckett 2016, p.10) “Evidence in support of the equivalence of the AC method across cultures must be documented”.
Cross-cultural AC research is limited (e.g., Bobko & Roth (2013), Buckett et al., 2017, Dean et al., 2008, Goldstein et al., 1998, Meiring, 2007, Thornton et al., 2019).
Assessor rating model: Cross-cultural issues in ACs (diversity)

Judgment processes

Process 1
- Initial impression

Process 2
- AC rating

Judgment outcomes

Factors contributing to the accuracy of judgments

- Relevance
- Availability
- Detection
- Utilization

Assessees’ behaviour
Assessors’ access
Assessors’ perceptiveness
Assessors’ schemes

race, ethnicity, gender, age
Assessee performance model: Cross-cultural issues in ACs (diversity)

Knowledge, skills, abilities, and other characteristics

Ability to identify criteria

Impression management

race, ethnicity, gender, age

Performance
Interplay Model: Cross-cultural issues in ACs (diversity)

- **Assessee's behaviour**
- **AC ratings**
  - race, ethnicity, gender, age

**Activated affective and cognitive representation of the situation**

**Cognitive-affective unit**

**AC Situation**
- Strength
- Relevance
Research Agenda: Cross-cultural issues (diversity)

- **Assessors**
  - How do assessors’ stereotypes influence their ratings in cross-cultural ACs?
    - Can training and/or diverse assessment boards reduce stereotypes?

- **Assessee**
  - How do different cognitions in cross-cultural ACs influence performance ratings?
    - Is the ability to identify criteria and/or impression management influenced by cultural background?

- **AC Situation**
  - How do AC design factors affect cross-cultural assessees’ performance (exercise type, dimensions)?
    - Do perceptions and/or behaviour vary depending on design factors?
Annual Review of Organizational Psychology and Organizational Behavior

Toward a Better Understanding of Assessment Centers:
A Conceptual Review

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Thank you for your attention

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