Evidence-Based Practices in Assessment Centres

Strengths, Concerns, and Challenges from a Global Survey

Presented by

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Evidence-Based ACs?

- Assessment Centres enjoy a reputation as evidence-based practices *(Furnham, 2008; Lievens, 2002)*.
  - Is this reputation warranted?
  - How well is research reflected in practice?
  - What are we doing well? What can we do better?

- We use a worldwide survey of AC practices to examine the state of the field from the lens of evidence-based practice.
  - For brevity, “AC” = assessment and/or development centre.

What Kind of Evidence?

“Evidence-based” can mean:

- Following the practices recommended by existing research and practitioner expertise for ACs in general.
- Collecting local evidence to support specific practices in a specific context.

Agenda

- Survey background & methodology.
- Are we following the general evidence we have?
  - Areas of strength and concern.
- Are we collecting the local evidence we need?
  - Areas of strength and concern.
- Are we practicing in areas where evidence is lacking?
- Conclusions.

Survey Background

Project Collaborators

- Dan Hughes
- Philippa Riley
- Ali Shalfrooshan
- Nigel Povah

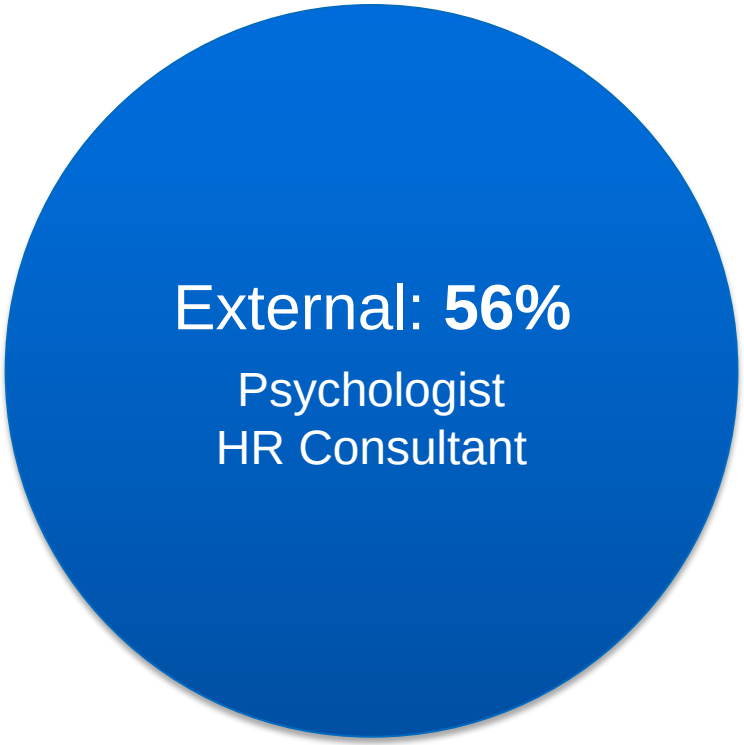
- Alyssa Gibbons
- George Thornton III

Survey Goals

- Obtain a current snapshot of AC/DC practices **worldwide**.
- Incorporate both practitioner and academic viewpoints in survey design.
- Compare to previous surveys, eg:
  - *Povah, Crabb & McGarrigle (2008)*
  - *Krause & Thornton (2009)*
- Also capture emerging trends:
  - Technology, cultural adaptations

Respondents

- Recruited AC practitioners from professional associations, personal contacts, word of mouth, and social media.

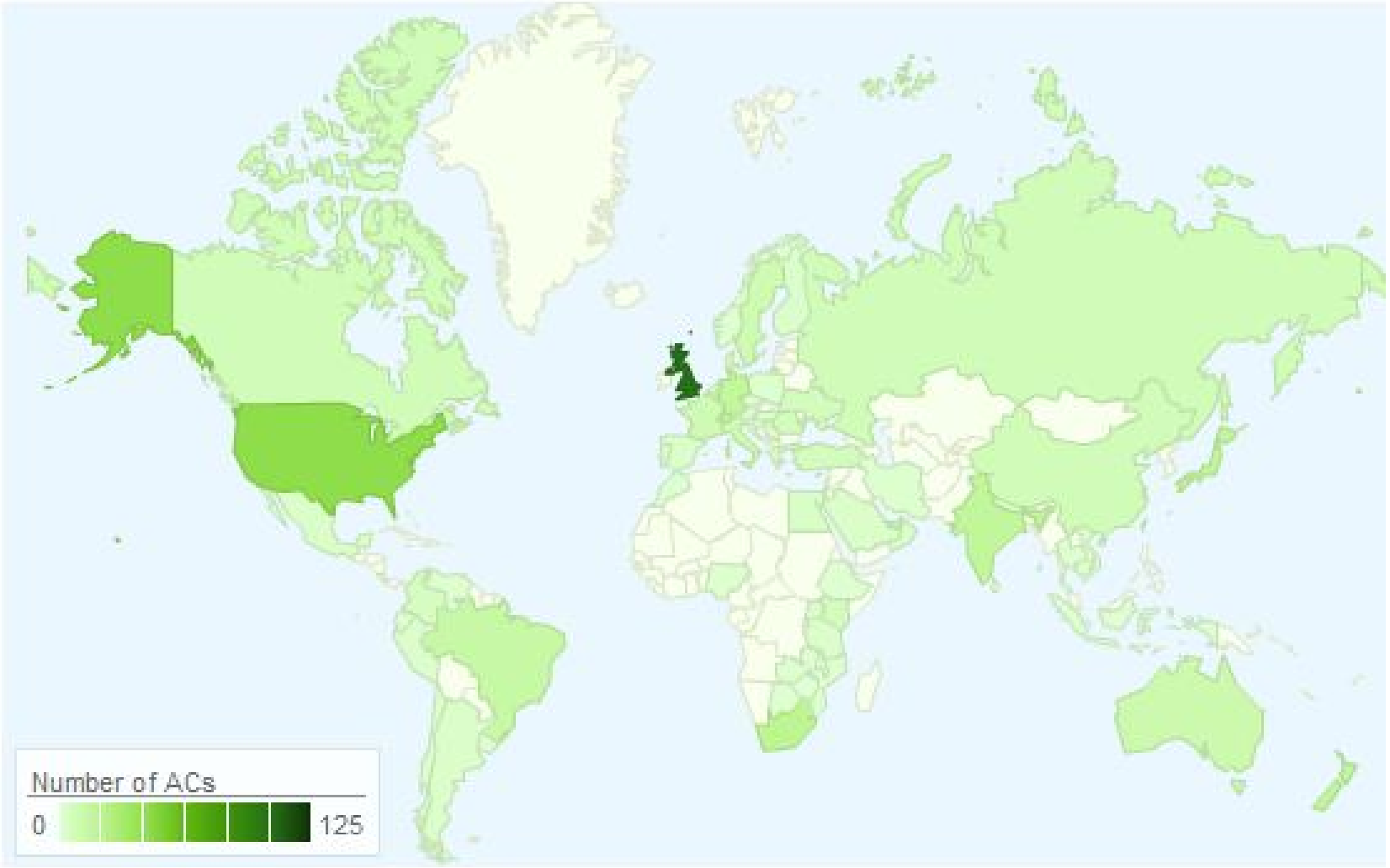


Method

- Respondents asked to describe **one specific AC or DC** they knew well.
  - **Not** mentally averaging across many ACs.
  - Could refer colleagues to describe other ACs.
  - In total, **511** unique ACs described.

- Online survey
  - Administered in English via Survey Monkey.
  - Anonymous format.
  - Approximately 59 questions (branching design).
  - Data collected August – November 2011.

Locations of ACs



Geographic and Cultural Diversity

- ACs implemented in **82** countries.
  - **77%** operated within one country only.
  - **23%** operated in multiple countries.

- Most common:
  - United Kingdom: **32%**
  - United States: **13%**
  - South Africa: **6%**

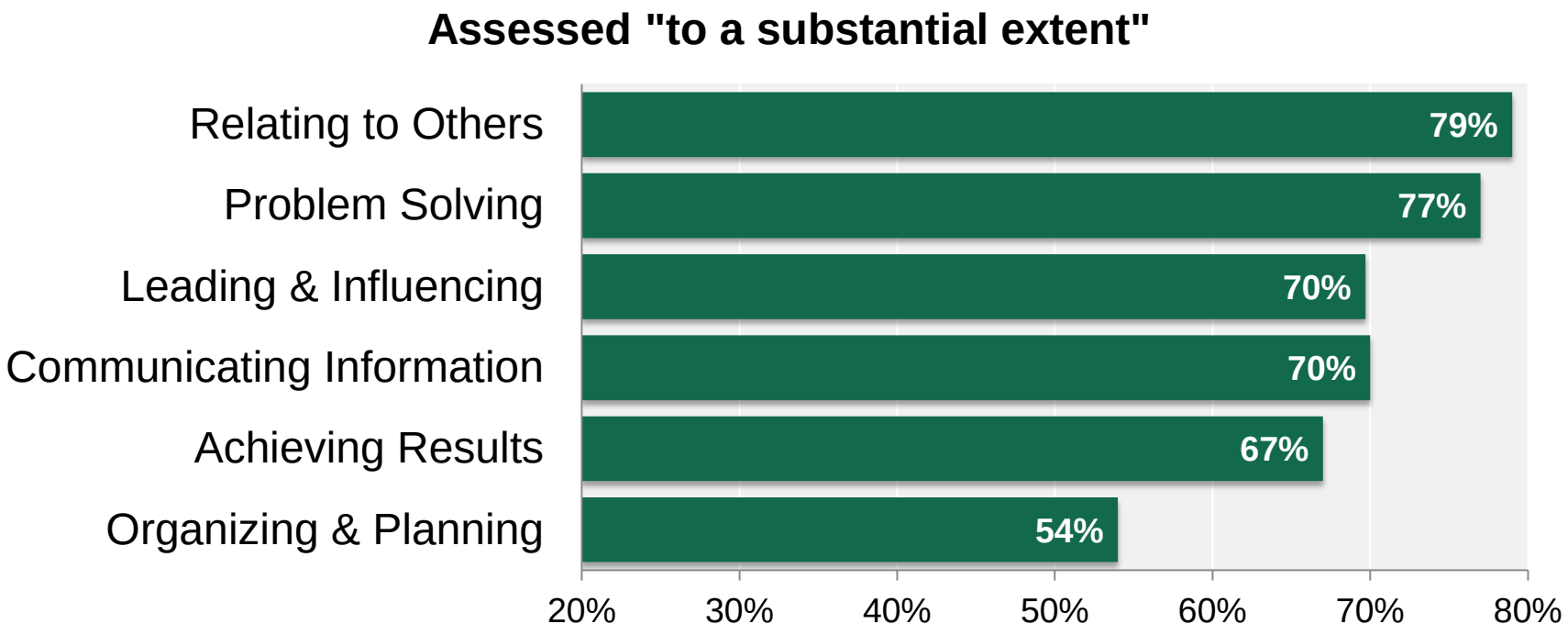
Are We Following the Evidence We Have?

Strengths: Assessors

- **92%** of assessors receive some form of training.
  - Up from 80% in prior surveys *(Povah et al., 2008)*.
- Training is empirically supported:
  - Dimensions: **94%** *(Scheicher, Day, Mayes, & Riggio, 2002)*
  - ORCE: **77%** *(Thornton & Zorich, 1980)*
- **98%** provide assessors with rating aids:
  - Definitions: **91%**
  - Example behaviors: **80%**
  - Checklists: **58%** *(Reilly, Henry, & Smither, 1990).*
  - Behaviorally anchored rating scales: **45%**

Strengths: Competencies

- **99%** use well-established competencies (at least one):



- All of these competency categories show predictive validity in AC meta-analyses *(Arthur et al., 2003; see also Meriac et al., 2008).*

Strengths: Competencies

- **77%** assess between 3 and 6 competencies per exercise *(Gaugler & Thornton, 1989).*
  - Although more competencies assessed across the AC as a whole (*M* = **6.7**).

- Many fit the emerging **mixed-model** perspective *(Hoffman, 2012)*:
  - **49%** collect both exercise and dimension/competency information.
  - **35%** use both to form the OAR.

Strengths: Additional Techniques

- When simulation exercises are combined with other techniques, they are most often techniques that show **incremental validity:**
  - Personality tests (**67%**)
  - Cognitive ability tests (**57%**)

Concerns: Hybrid Centers

- Research suggests that ratings made for decision-making are different from ratings made for development *(Murphy & Cleveland, 1995)*.
  - Different errors and biases; distinguishing among dimensions.

- Often recommended that ACs focus on **either** assessment **or** development *(Thornton & Rupp, 2005)*.

- However…
  - **28%** = primarily selection (but some feedback).
  - **26%** = primarily development (but some decision-making).
  - **24%** = equal emphasis
  - Only **23%** were single-purpose.

Concerns: Short ACs, Short Training

- **61%** of ACs last one day or less.
  - **74%** use 4 exercises or fewer.
  - **77%** assess each competency only 2 or 3 times.

- **34%** of assessors received less than 1 day of training, or no training at all.

- In **24%** of ACs, each assessor was responsible for more than 2 participants.

Concerns: Assessors & Feedback

- Evidence suggests that psychologists provide the most valid ratings *(Gaugler et al., 1987)*.
  - Only **53%** use psychologists as assessors

- International Guidelines recommend a diverse pool of assessors, including managers and psychologists
  - Only **25%** of ACs use both of these groups as assessors
  - **16%** use neither managers nor psychologists
  - **34%** use assessors from only a single perspective only.

- Although prompt feedback is important for development, **38%** of **developmental** ACs have more than a week delay in providing feedback.

Are We Collecting the Evidence We Need?

Strengths: Job Analysis

- **97%** of ACs reported using at least one job analytic technique.
  - **64%** used 3 techniques or more!

- Most common techniques:
  - **54%** reviewed the existing job description.
  - **52%** reviewed the existing competency model.

- But these techniques were rarely used alone.
  - **92**% of ACs using these techniques also used at least one other technique (e.g., interviews with management, interviews with job incumbents).

Strengths: Customisation

- Only **12%** of ACs used off-the-shelf, prewritten exercises without customising or adapting them to the organisation.

- Job analysis + customisation: real efforts to collect local data about the specific organisation and target the AC to fit it.

Concerns: Assessor Evaluation

- Only **45%** of ACs require assessors to be formally certified.
  - Possible confusion about what “certification” means.

- **21%** of assessors are not evaluated **at all.**

Concerns: Outcome Evaluation

- **86%** of respondents evaluated their ACs.
  - But this evaluation was often limited to reactions of participants, assessors, and other stakeholders.

- Only **42%** conducted some type of validation analysis.
  - Content, predictive, concurrent, internal structure, or external construct validity.
  - Content analysis was by far the most common (**25%**) *(cf. Murphy, 2009).*

Concerns: Outcome Evaluation

- Although developmental ACs are supposed to produce changes in performance, only **18**% evaluate this change.

- Only **13**% conduct adverse impact or fairness analyses.
  - **50**% of North American ACs.
  - **23**% of multi-regional ACs.

- Only **15**% formally examine Return on Investment.

Where Are We Lacking Research?

Gaps: Culture

- **23%** of the ACs in our sample were administered in multiple countries.
  - **13%** in 2 or more major geographic regions.

- Many ACs (**74%**) make adaptations for culture.
  - Exercise content (**51%**), dimension definitions (**51%**), feedback processes (**42%**).
  - But how do we determine which adaptations to make?

- Lots of commentary on how culture *might* affect assessment *(e.g., Bernthal & Lanik, 2010; Briscoe, 1997; Lievens & Thornton, 2005; Lanik & Gibbons, 2011)*.
  - Few if any published empirical studies *(one: Melchers & Annen, 2010)*.

Gaps: Technology

- **57%** of ACs used at least one technology feature.
  - **23%** use automated or semi-automated reports.
  - **21%** use video recording.
  - **20%** use real-time phone interaction with participants.

- And many plan to add tech features within 2 years:
  - Computerized entry of behavioral observations (**28%**).
  - Automated or semi-automated reports (**26%**).
  - Automated or semi-automated scoring (**23%**).

- Users perceive a “small” to “medium” positive impact of technology overall.
  - *M* = **3.38** on a 5-point scale.
  - Most positive impact on **efficiency** of running the centre.

Gaps: Technology

- Specific features correlated with **perceived** benefit of technology:
  - Automated scheduling: *r* = .**23** with overall impact, *r* = **.39** with cost.
  - Automated scoring: *r* = **.21** with overall impact.
  - Online simulations: *r* = **.23** with impact on realism.
  - Automated reports: *r* = **.24** with impact on duration.

- Very little published research evaluating technology features.
  - Video recording doesn't have much of an effect *(Ryan et al., 1995).*
  - Computerized exercises *can* predict criteria above cognitive ability *(Lievens, van Keer, & Volckaert, 2010).*
  - But what about phone interactions, delayed interactions, virtual reality, etc.?

Gaps: Integrated Exercises

- **39%** of ACs used integrated or “day in the life” exercises with multiple components.
  - Average of **4.5** components.
- Technology makes integrated exercises easier to deliver.
- But we know little about how the interdependence of integrated components affects performance, rating accuracy, and outcomes.

Gaps: Development

- **62%** of ACs involve a substantial development component.
  - **84%** of ACs – including selection emphasis ACs – provide feedback beyond pass/fail.

- But development is seldom evaluated as an outcome *(Rupp et al., 2006)*.
  - What AC design features produce development?
  - Is a good AC a good DC?
  - Which differences matter?

Conclusions

Are ACs Evidence-Based?

- Where research evidence is clear and unambiguous, most ACs tend to follow it.
  - We have the best evidence about internal design features (dimensions, exercises), assessor training.
  - Most ACs follow research recommendations in this area.

- But logistical and practical considerations sometimes override evidence.
  - Pressure to do more with less.
  - Short assessor training, hybrid centers, etc.

Where is More Evidence Needed?

- Although some are rigorous about evaluating their own ACs, gathering evidence about effectiveness/validity of individual ACs is not as widespread as it could be.

- Dearth of evidence on several critical issues facing ACs of today:
  - Technology.
  - Culture.
  - Impact on development.

Moving Forward: Closing the Gaps

- More and better basic research.
- More and better evaluation of operational ACs.
- More multi-AC studies:
  - Generalisability and replicability.
- Establish effects of design choices on **bottom line outcomes**.
  - Validity, performance improvement, ROI.

Questions?

You can download the full Research Report for this survey at **http://www.adc.uk.com/resources/research/findings/**