

LOOKING BACKWARD TO MOVE FORWARD

Early origins of exercises, dimensions,
and assessment center practices

Scott Highhouse



WILL POWER

Reflected a new school

- Organismic, Gestalt, Holistic
- Focused on the whole person
- Minimized the role of standardized tests

Overview

- Who are the early pioneers of the AC?
- Where did AC practices come from?
- How should the AC be modified to reflect the state of the science?

Early Pioneers

- German military psychology (1920-1941)
- WOSB of the British Army (1941)
- OSS "Station S" (1943)

MAX SIMONEIT



- Chief of German military psychology
- Introduced Gestalt concepts to testing
- Assessment of "will power"
- Obstacle courses that could not be completed



W.R. BION

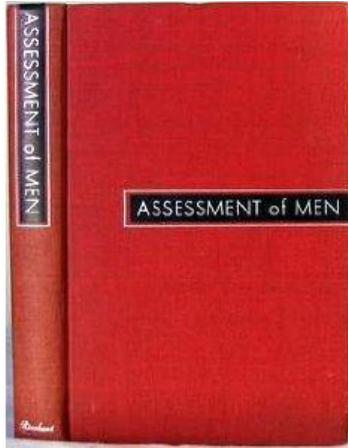
- Trained as a psychoanalyst in England
- Believed that pressure for candidate to look good should be put into conflict with the pressure for him to cooperate
- Emphasized group situations



Henry Murray

- “Organismic” system of assessment
- Calls for improvement of observer, rather than improvement of mechanical instruments or tests
- Multiple people observe person-in-situation

ASSESSMENT OF MEN



The Stress Situation



Assumptions

- Each person evaluated according to his or her unique history (idiographic vs. nomothetic)
- The whole is not the sum of its parts
- Complicated characteristics of candidate must be assessed by similarly-complicated human being

DOUGLAS BRAY

- Inspired by OSS report
- Opportunity to apply ideas when joined ATT in 1956
- Management Progress Study

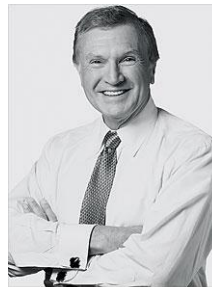


FIRST ASSESSMENT CENTER

- Michigan Bell Telephone in 1958
- Modified the research one
 - Eliminated personality and projective tests
 - Substituted clinical interview with job-related
 - Emphasized situational performance tasks

WILLIAM BYHAM

- *Harvard Business Review* article in 1970
- Byham founded DDI with Bray



COMMON FAMILIES OF EXERCISES

- Leaderless group discussions
- Role-play simulations
- In-baskets

Leaderless Group Discussions



LGD

From now on thru this problem you are Mr. Blue, Mr. Red, etc. You may take a seat at any one of the 6 chairs. We are interested in finding out how well you can present your point of view on some problem. Consequently, we are asking you to present a case for a man who is being considered for promotion within the company (Bernard M. Bass Papers, May 7, 1964).

FIRST LGD

- Occurred in Germany around 1925
- J.B. Rieffer developed "round-table" technique to identify army officers
- Navy gave it higher importance
 - Argue the merits of smoking cigarettes
 - What is the value of taking dance lessons?

LGD

- Picked up by WOSB to observe tendencies that were group-cohesive and group-disruptive
- OSS used them to assess “effective intelligence” as well as understanding of current events.

LGD APPLICATIONS

- National Institute of Industrial Psychology in UK used the “Country House” technique for executives
- Early experiments by U.S. Civil Service Commission—much criticism
- Prospect for replacing interviewing and testing seemed slim.

ROLE PLAYING



ROLE-PLAY SIMULATIONS

- Originated with J.L. Moreno—father of psychodrama and group therapy
- Inspired OSS improvisations
 - Candidate 1: wants to become member of exclusive club in town
 - Candidate 2: club owner who has heard rumors of him being “blackballed” by other clubs

OSS ROLE PLAYS

- Tailored to resolve doubts about candidate (accept criticism, use tact)
- Assessors did not use rating forms
- Tolerance for alcohol was also part of assessment

POST-WAR

- Most industry applications of role play involved training and development
- Common in assessment center
 - Simulated phone calls
 - Coaching a direct report
 - Resolving an issue with a peer

IN-BASKET



Early this morning, your predecessor was killed in a car crash and you have been abruptly assigned to take his place. You have been given access to the contents of his in-basket (e.g., memos, letters, reports, etc.) and told that over the next few hours you will be evaluated with regards to how well you address the materials contained within. Good luck!

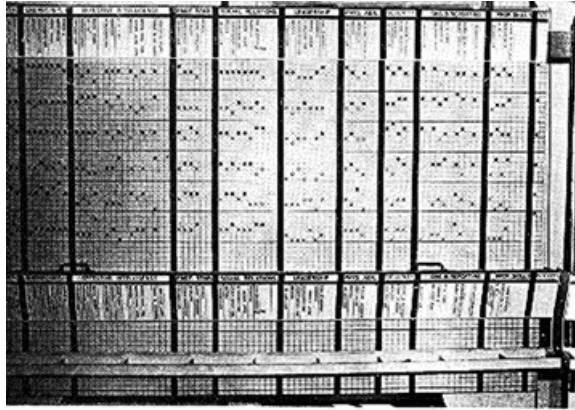
IN-BASKET

- Candidates cannot bypass dealing with a problem
- Must make decision without consultation
- Must decide within time constraints

EDUCATIONAL TESTING SERVICE

- Norman Frederiksen created first in-basket for use by the Air Force in 1952
- ETS developed first assessment center in-basket for AT&T
- First fully-objective scoring system by NY Port Authority for police (Lopez, 1966)

DIMENSIONS



The Rating Board

HOLISTIC SCHOOL

- German's did not believe that traits had usefulness for prediction
- WOSB looked only at *quality of social relations, stamina, practical competence*
- OSS staff recorded ratings on dimensions, but were philosophically opposed to creating a composite score

OSS DIMENSIONS

	Interview	LGD	Brook	Obstacles
Energy	X	X	X	X
Intelligence	X	X	X	
Stability	X			
Social	X	X	X	
Leadership	X	X	X	
Physical	X		X	X
Security	X			
Propaganda	X	X		

TOO MANY DIMENSIONS?

- Management Progress Study included 26 dimensions. Many operational centers in double digits.
- Carter (1954) warned assessors only capable of rating 3 or 4 at most.

HOW MANY DIMENSIONS DOES IT TAKE TO EXPLAIN AN OAR?

- Schmitt (1977) 3 out of 17
- Sackett & Hakel (1979) 5 out of 17
- Russell (1985) 1 out of 16

TEAM APPROACH

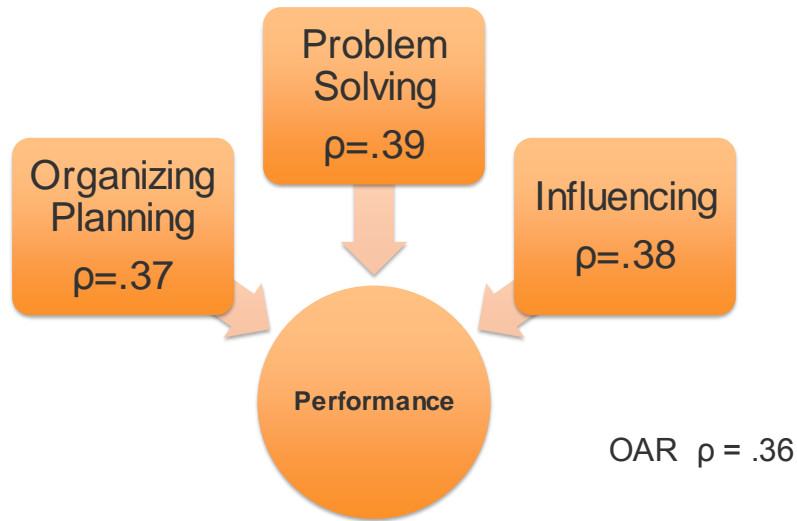
- A defining feature of AC
- Murray brought approach to OSS, based on experiences doing “grand rounds”
- Bray originally used team of university-based psychologists in summer
- No mechanical or statistical formulas in typical assessment center approach

DOES CONSENSUS BEAT GRADE SCHOOL MATH?

Sackett & Wilson (1982) found that a simple average of dimension scores predicted the OAR 93.5% of the time.

DOES OAR OUT-PREDICT ALGORITHM?

Arthur et al. (2003) meta-analysis showed that a combination of dimensions correlated more (.45) with performance, than the OAR (.36)



Why don't we use fewer dimensions and do away with the consensus process?

USER ACCEPTANCE

“Many assessors report a potent sense of satisfaction from putting the evidence together and creating a holistic view of the assessee” (Howard, 1997)

“It’s like adding apples to pears and counting the answer in elephants.”

“...(group consensus) accounts for these differences which are too minor to be differentiated in the rating scales.”

DETAILS AND NUANCE

Simply averaging ratings does not allow assessors to take into account subtle variations in candidate behavior or the dynamic, changing business environment they will be entering.

Sarbin's (1943) investigation of two methods for predicting success of University of Minnesota undergraduates admitted in 1939.

**High school rank +
College Aptitude test**

$$r = .45$$

**Above predictors +
Holistic judgment**

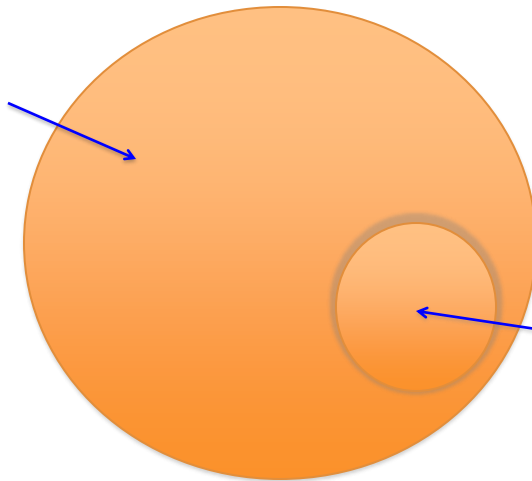
$$r = .35$$



Which scenario has a greater chance of actually happening?

- a. An all-out nuclear war between Russia and the U.S.
- b. An all-out nuclear war between Russia and the U.S. in which neither country intends to use nuclear weapons, but is triggered by the actions of a third party such as Libya, Pakistan, or Israel.

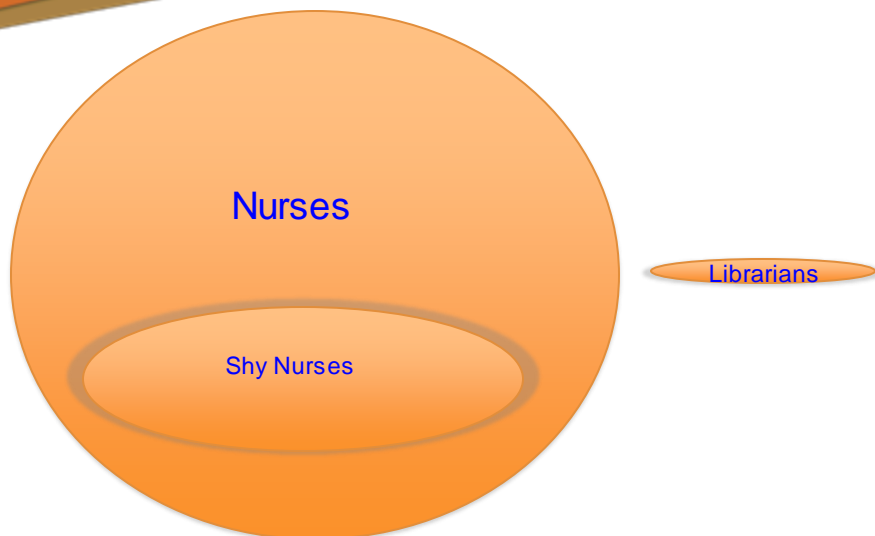
All possible ways that Russia and the U.S. could end up in an all-out nuclear war.



Just one way Russia and the U.S. could end up in an all-out nuclear war.

Jane was randomly selected from a list of members of the local PTA. She is shy, intellectual, and awkward interpersonally. Which of the following statements is more likely to be true about Jane?

- a. Jane is a nurse
- b. Jane is a librarian



Hypothetical hiring scenario

	Work Sample Rating	Promotability Rating
K. Martin	5	80
R. Davis	7	66

Highhouse (1996) *Organizational Behavior and Human Decision Processes*.

	Work Sample Rating	Promotability Rating
K. Martin	5	80
R. Davis	7	66
T. Doyle	7	54

35% Martin 65% Davis 0% Doyle

	Work Sample Rating	Promotability Rating
K. Martin	5	80
R. Davis	7	66
T. Doyle	4	80

68% Martin 32% Davis 0% Doyle

In general....

- Details and nuance increase confidence in a prediction, but reduce accuracy.
- Even experts do not effectively separate the relevant from the irrelevant.

General Conclusions

- Many ideas of early pioneers have not stood up to scrutiny
- Operational ACs correctly focused on exercises and objective scoring
- Large # dimensions and consensus OAR are shining artifacts of the past

Assessment Centers of the Future

- Use drastically fewer dimensions and combine them using a simple formula:
Problem Solving + Influencing +
Organizing/Planning + Communication =
OAR

BGSU.

THANK YOU.

Department of Psychology