

# "Can Gambling With Fewer SMEs Pay Off?"

Presenter: Laura Sohl

Oklahoma Office of Personnel Management

Co-author: Natasha Riley

Oklahoma Office of Personnel Management

Co-author: Dr. Juan Benavidez

Presidio Sciences

# Job Analysis

- Necessary for a valid and legally defensible selection device
- We need subject matter experts – but how many?

# How Many SMEs?

- Academia: large participant pool
- Applied: limited employees
  - Availability
  - Manpower

# Previous Studies

- SME committee versus job incumbents
  - Ash, Levine, Higbee, & Sistrunk (1982)
  - Tannenbaum & Wesley (1993)
    - Compared task ratings and KSAs
- High agreement – nearly the same
  - Use small group instead of larger group?



## Previous Studies, cntd.

- Maurer & Tross (2000)
  - Cautions against small numbers of SMEs because they may influence each other
    - Group polarization  $\Rightarrow$  incorrect shifts in judgment
- Peterson & Jeanneret (1997)
  - Small multi-incumbent jobs ( $n = 10 - 100$ ), require a 50% or larger sample
- IPMAAC listserv: 3-10 SMEs
- Many different ideas

# A Further Look

- Conducted our own study
- Job analysis for juvenile specialists
  - Compare data between
    - SMEs who met together and received task statements and KSAs
    - Incumbents who did not meet and received task statements and KSAs separately

# Who Were These Participants?

- 6 SMEs
  - High performing employees
  - Representative of race and gender
- 26 incumbents (from pool of 50)
  - Completed questionnaires of tasks/ksas
  - Obtained 50%

# Who Were These SMEs?

	#Years employed	Shift	Gender	Age	Ethnicity
1	21	9-5	F	50	-
2	6	6-2	M	30	Af. Am
3	4	7-3	F	49	C
4	9	8-4	F	51	C
5	5	8-4	F	56	C
6	17	Varies	F	47	Af. Am



# Method

- 6 SMEs: During the meeting
  - Reviewed typical job description
  - Reviewed 81 tasks and KSAs
    - Discussed each, with typical Juvenile Specialist in mind, for job relatedness

Task	Criticality of the Task			Relative Time Spent on Task			
	0	1	2	0	1	2	3
Conduct pat searches of new juveniles following established policies and procedures.			X				X

# Method

- 6 SMEs: During meeting
  - Independently rated for criticality, time-on-task, and first day knowledge
    - “Judgments..by individual committee members..are masked by the consensual process. By obtaining independent ratings...one could define a more accurate domain of the knowledge and abilities important for competent performance” (Tannenbaum & Wesley, 1993).
- 26 incumbents: No meeting
  - Independently rated tasks and KSAs

## Results

- $t(160) = -3.19, p < .002$
- 12 out of 81 were significantly different
- 6 SMEs had lower variance (9 of 12)
  - May be due to shared frame-of-reference (same mental representation of a juvenile specialist)
  - No opportunity for non-meeting incumbents to clarify
    - “Extras” introducing error?

# Results

- 26 incumbents had higher ratings (10 of 12)
  - seen in literature as over-inflation (Morgeson & Campion, 1997)
  - Socially desirable responses

# More About Over-Inflation

- Tross & Maurer (2000)
  - Longest-employed incumbent more likely to over-inflate ratings
    - Desire to self-enhance (more invested?)
    - Less accurate from job tasks becoming “automized”
- No significant correlations between number of years employed and ratings on the significantly different tasks and KSAs

## Could Less Be More?

- Possibly lower error
- Fewer SMEs allows them to collectively settle on the same “picture”
- Less data to analyze
  - Faster service to customers by developing selection device more quickly

# What About Group Polarization?

- Maurer & Tross (2000)
  - concerned that small numbers of SMEs may lead to group polarization
- Could group polarization be a good thing?
  - Maybe it keeps ratings “real”
- More research needed

# References

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