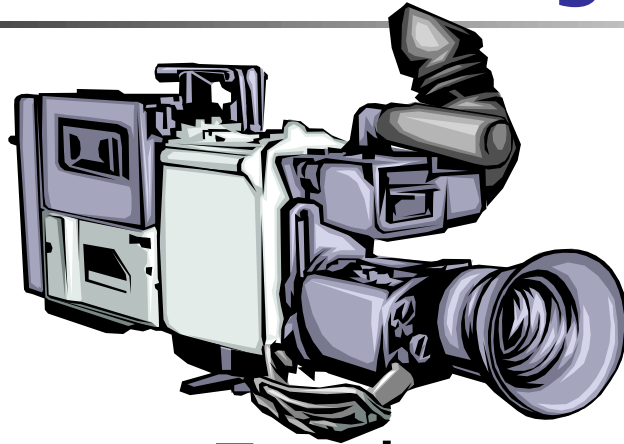


# Using Video Technology to Test for Corrections Sergeants



- James Frankart
- Presented 6/5/2000
- IPMAAC Spring Conference
- Washington, DC



# Agenda

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- Overview
- Why Do Video Testing
- Literature Review
- Advantages & Disadvantages
- Previous Examination
- New Video Based Test
- Results and Discussion



# Overview

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- Corrections is the growth industry of the 90's
  - Corrections is now PA's 2<sup>nd</sup> largest agency
- Need for a valid selection procedure that was more administratively efficient
- Decided that video based test could meet our needs



# Why Do Video Testing

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- What Does the Research Show
- Advantages
- Disadvantages



# What Does the Research Show

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- The next series of slides will show a number of studies on video testing
  - PA – Corrections Officer Trainee
  - Interactive Video Assessment of Conflict Resolution Skills
  - Video Based Vs Paper and Pencil Method of Assessment
  - Performance Based Testing of Interpersonal Competence
  - Corrections Officer Video Test Validation Report



# The Selection of Entry Level Corrections Officers – PA Research

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- Steve Berkley & Charlie Sproule
  - Outlines the 20 year evolution of testing procedures for entry level Corrections Officers
  - Test has undergone many changes:
    - >1981 = multiple choice general abilities test
    - <1981 = more face valid and added oral
    - 1992 = writing sample was added
    - 1996 = oral and writing sample eliminated, many of the same concepts measured with video segments



# The Selection of Entry Level Corrections Officers – (Continued)

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## ■ Results

- Did validation studies in 1984 and 1996
- Validity increased from .34 to .69
- Adding video to test reduced group differences by race and gender
- Adverse Impact ratios were 84% for Blacks vs. Whites and 64% for male vs. females
  - M v F difference in selection ratio was veterans preference



# The Selection of Entry Level Corrections Officers – (Continued)

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- In 1996, the Structured Oral and Writing Sample were dropped from the examination due to budget considerations
  - Same concepts in 1992 test plus
    - indirect measurement of writing ability (Clarity of Expression)
    - section on Judgment & Problem Solving
    - the two new subtests have not yet been validated
  - The first class to go through the Academy after this test was implemented received the highest scores ever
  - New test saves the Commonwealth about \$500,00 per year



# Interactive Video Assessment of Conflict Resolution Skills

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- Olson-Buchanon et al in Personnel Psychology
- (1998)
- Used a Branching test as a measure of Conflict Resolution Skills
- Collected information of Conflict Resolution as well as verbal and cognitive abilities
- Criterion was manager ratings
- Conflict skills were found to be significantly related to ratings but cognitive skills were not related
- Conflict skills had no adverse impact for women



# Video Based Vs Paper and Pencil Method of Assessment

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- Chan D. & Schmitt N. 1997 J A P
- Tested difference between the two methods
- Results
  - Video based tests had
    - Lower Black White Differences
    - Better candidate acceptance (Face Validity)
    - Less Reading Comprehension required



# Performance Based Testing of Interpersonal Competence

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- Corey D. & MacAlpine D: 1995 B-PAD Technical report
- Both the stimuli and the responses are videotaped as an applicant plays the part of an incumbent
- Results show
  - No mean differences between all groups
  - Standardize the stimuli for all candidates



# Corrections Officer Video Test Validation Report

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- Swander C. & Spurlin O. 1994 Ergometrics
- Used a video based test to test how candidates might interact with inmates
- Looked at test in a variety of states
- Results
  - Positive reduction in turnover & sick leave
  - Small adverse impact between groups
    - Less than other testing methods
    - Reduced reading requirement



# Advantages

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- Fidelity
- Lower Adverse Impact
- Reduces Reading Requirement
- Validity
- Candidate Acceptance
- Face Validity



# Disadvantages

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- Costs a lot
  - rule of thumb
    - \$1000.00 per finished minute
- Requires a lot of time to develop
- Need for facilities and equipment to administer the tests



# Previous Examination

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- Consisted of Three Parts
  - Job Knowledge test
  - Written Communications
  - Oral Examination



# Written Multiple Choice Test

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- 105 items
- Job Knowledge test
- Content Areas
  - Observation, Visual Perception, Memory
  - Rules, Regulations, Policies & Procedures
  - Security Methods and Analysis – Judgment
  - Written Communications – Effective Expression



# Writing Skills Test

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- 30 items
- Measure of report writing
- Given reference booklet which contains scenarios & blank report form
  - Asked questions using this format
    - Based on the scenario and report form what goes in Box A?
- Has a separate passing point



# Oral Exam

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- Administered to those who passed the Written and Writing Skills test
- Consisted of five questions
- Answers rated by a two member board
- Factors were
  - Judgment and Problem Solving
  - Interpersonal Skills
  - Oral Communication



# Reasons for Change

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- New job study conducted in 1997
  - Previous study done in 1982
  - Had better information about what job requires
- Make testing process easier for candidates & less burdensome for staff
- Cost of testing
  - Estimated new saved \$125.000.00



# New Video Based Test

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- Written Machine Scored Test
- Measures the same concepts as previous exam – oral communication
  - Can be assessed through employment interview
- Three hours long
- Self Administering



# New Video Based Test- (continued)

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- Measures four subject matter areas
  - Safety and Security
  - Effective Working Relationships
  - Report Writing
  - Rules and Regulations
- Developed enough video scenes do complete two versions of the test

# Safety and Security (Two Video Scenes)

- Measures your ability to identify appropriate and inappropriate actions relating to Safety and Security issues likely to occur on the job.
- 50 Questions
- Based on A10, A11, & A14
  - A10 = Exercise proper judgment on the job
  - A11 = react quickly and calmly to situations
  - A14 = Understand significance of changes in behavior of inmates/staff



6/20/2000



# Safety and Security (Type of Questions)

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- Should the Sergeant do X when Y occurred?
- (1) yes
- (2) no



# Safety and Security (Type of Questions)

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- Should the Sergeant have ordered the officer to take a specific action?
- (1) yes
- (2) no

# Effective Working Relationships (2 Scenes)

- Measures your ability to establish and maintain effective working relationships with staff (focus is primarily on dealing with staff)
- 50 Questions
- Based on A4 & A13



- A4 = establish and maintain effective working relationships with others
- A13 = coordinate and direct the work of others



# Effective Working Relationships (Type of Question)

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- When the Sergeant approached the Officer doing X, should the Sergeant not mention to the Officer about X at that time, but talk to him about X at the end of the shift?
  - (1) Yes
  - (2) No



# Effective Working Relationships (Type of Question)

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- When the Tradesman returned to the work detail, should the Sergeant have told him do X?
  - (1) Yes
  - (2) No



# Report Writing ( Two Scenes)

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- Measures your ability to communicate in writing by identifying appropriate information on a misconduct report. Report must be clear, concise, and correct
- Twenty Questions
- Based on A6, A7, & A12
  - A6 = prepare reports which describe incidents
  - A7 = Review reports that describe incidents
  - A12 = recall relevant information about incidents



# Report Writing –(Types of Questions)

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- In which boxes should Officer X be mentioned?
- (1) Boxes X,Y,and Z
- (2) Boxes X and Z
- (3) Boxes X, Y, and T
- (4) Boxes T, U, and V



# Report Writing –(Types of Questions)

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- Which one of the following describes why Inmate X was Y, and should be mentioned in Box Z?
  - (1) He thought Inmate A had betrayed him
  - (2) He wasn't given as much food as the other inmates
  - (3) Was yelling he wanted more \_\_\_\_\_
  - (4) He didn't like Inmate B attitude



# Rules and Regulations (Non Video Part of the Test)

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- Measures your knowledge of the Department's rules regulations, policies and procedures
- 25 questions
- Based on K1, K7 & K8
  - K1 = department & intuition rules and regulation
  - K7 = cell entry/extraction, CERT/FERT teams
  - K8 = force continuum and use of weapons



# Rules and Regulations (Type of Questions)

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- According to DOC Policy XXXX any alteration to \_\_\_\_\_ must be approved by the
  - (1) Control Sergeant
  - (2) Shift Commander
  - (3) Deputy Superintendent
  - (4) Security Captain



# Rules and Regulations (Type of Questions)

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- An Inmate who has received a Class II misconduct can be scheduled for a hearing before the
  - (1) Housing Unit Sergeant
  - (2) Unit Management Team
  - (3) Shift Commander
  - (4) PRC



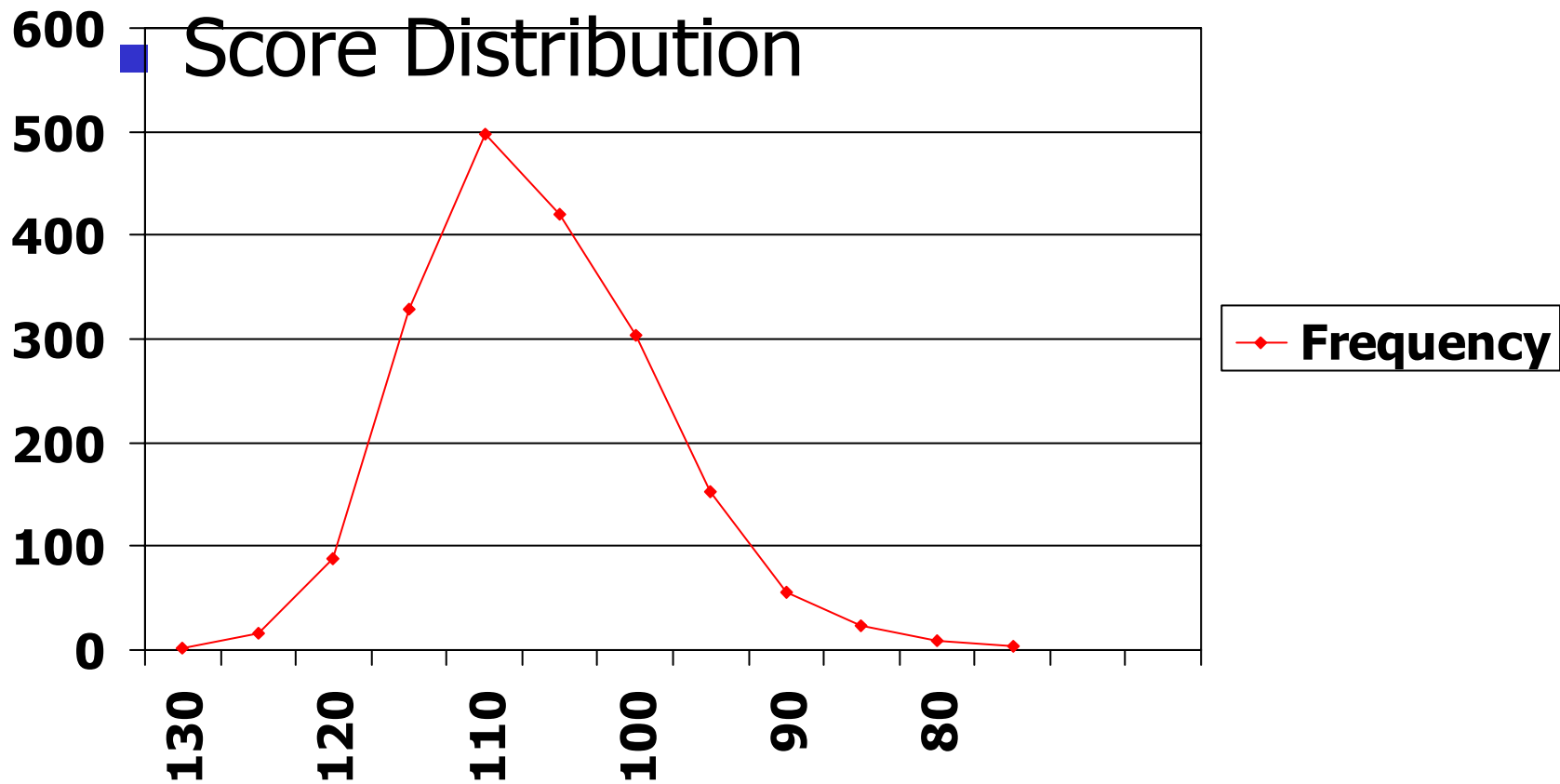
# Results

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- Test was a huge success
- On June 25 & 26, 1999 we tested 1897 applicants
- Applicant reaction was favorable
- Most were happy the oral was gone

# Results (Continued)





## Results (Continued)

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- Validity based on Content Model
- Each Institution was represented by a Subject Matter Expert
- Scoring was based on consensus of raters
- DOC Personnel has been very satisfied with the quality of applicants



# Questions & Discussions

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# New Video Based Test Where to Get More Information

- Call me
  - (717) 783 - 2697 ext 3516
    - Jfrankart@state.pa.us
  - Journals
  - World Wide Web
    - IPMAAC discussion list

