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# Video-based Testing: Advantages, Limitations, & Practical Feasibility

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# Use of Video

- ❖ “Video is the Next Wave”
  - January, 2004 edition of *TIP* described video as the “next ‘must-have’ tool” (Weiss, 2004)
- ❖ Use of video in interviews is a growing trend (Van Iddekinge, Raymark, & Roth, 2003)
- ❖ Continuously increasing access to video-based testing due to easier to use technology and decreasing cost

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# What is Video-based Testing?

- ◈ Not just one type of test – any selection procedure that incorporates video technology
- ◈ How is video incorporated?
  - Administration of test stimuli
  - Assessment of candidate performance
  - Combination of both administration and assessment
- ◈ Use in selection is continuum from very basic to fully involved

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# Video in Administration

- ❖ Present candidate instructions
- ❖ Present contextual information before a test exercise (e.g., background for a role play)
- ❖ Present test scenarios/questions/items to which candidates immediately respond
- ❖ Present information for in-baskets or other group-based administration tests

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# Video in Assessment

- ◈ Assess candidates *after* actual test
  
- ◈ Bring in assessors at a later date
  - Review video recordings of candidate performance
  - Observe and evaluate candidates
  
- ◈ Store ratings electronically

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# Advantages of Incorporating Video

## ❖ Greater standardization

- Consistent presentation of instructions and pre-test information
- Fully standardized administration - same questions in the *exact* same manner
- Creates more consistent view of “scenarios”
- Consistent response times

## ❖ Better candidate perceptions of fairness??

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# Advantages of Incorporating Video

- ❖ Greater flexibility in test domain coverage
  - Measure KSAs that may be traditionally difficult to assess due to safety, cost, or other practical issues
- ❖ Greater contextual information – higher fidelity
  - Provides clearer picture of the situation/scenario to be addressed
  - Adding visual info leads to fewer candidate inferences
  - Greater depth to scenarios (“realism”)
  - Constant improvements (technological advances) in capabilities allow for continuously increasing realism
- ❖ Better content validity??

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# Uniform Guidelines

“The closer the content and context of a selection procedure are to the actual work of the job, the stronger is the basis for showing content validity.”



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# Advantages of Incorporating Video

- ❖ More efficient administration
  - Removes assessment time from administration time
  - Allows for longer tests
  - Allows for greater job domain coverage
  - Allows for administration to greater number of candidates
  - No “dead time” due to no shows
- ❖ More cost effective administration
- ❖ Increases practical feasibility of administering individualized tests with lower group differences

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# Administration Time Example

- ❖ Selection procedure consisting of three components:
  - Structured Interview (30 minutes)
  - Role Play (20 minutes)
  - Presentation (20 minutes)
  - In-basket (2 hours – group exercise)
- ❖ 200 candidates

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# Advantages of Incorporating Video

- ◊ Fewer assessors needed
- ◊ More effective assessor training
  - Focus on assessing instead of administration
  - Can replicate assessment more easily in training
- ◊ Greater accuracy of ratings
  - Lower number of assessors leads to less assessor variation
  - Can “go back” if necessary and re-watch candidate
- ◊ Less cognitive demand on assessors
  - No responsibilities associated with administration
  - No “dual” roles

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# Advantages of Incorporating Video

- ❖ Better estimation of reliability / agreement in ratings
  - Candidates can be assessed by multiple panels, if necessary
  - Across panel reliability estimation possible, as opposed to only within panel agreement
  
- ❖ Greater flexibility
  - Assessors can take break if they need it
  - Easier rotation of candidates
  - Allows for control over unexpected assessor/ assessment issues (e.g., assessor illness)

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# Advantages of Incorporating Video

- ❖ Better record keeping/documentation of candidate performance
- ❖ Lower costs associated with assessment
  - No “dead time” due to no shows
  - Fewer assessors leads to reduced expenses

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# Assessment Cost Example

- ◈ Structured Interview
  - 45 minutes to administer
  - 25 minutes to assess
  
- ◈ 200 candidates

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# Disadvantages

- ❖ No criterion research
- ❖ Removes interpersonal aspect
- ❖ Reduced “non-verbal” communication

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# Questions