



Is remote administration of tests for international job recruitment ethical and fair?

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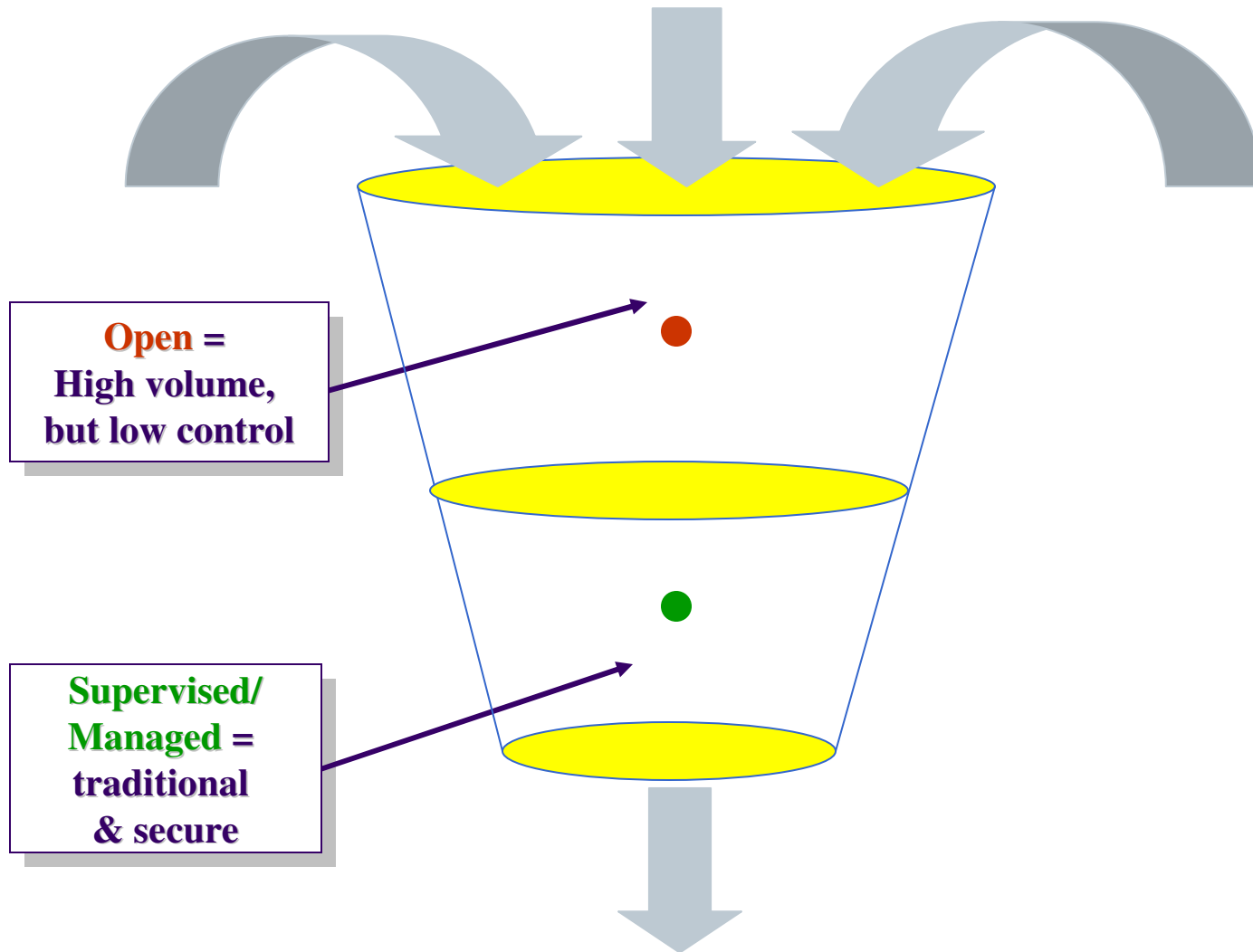
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ITC Conference, Brussels, July 2006

> ITC Internet Test Administration modes

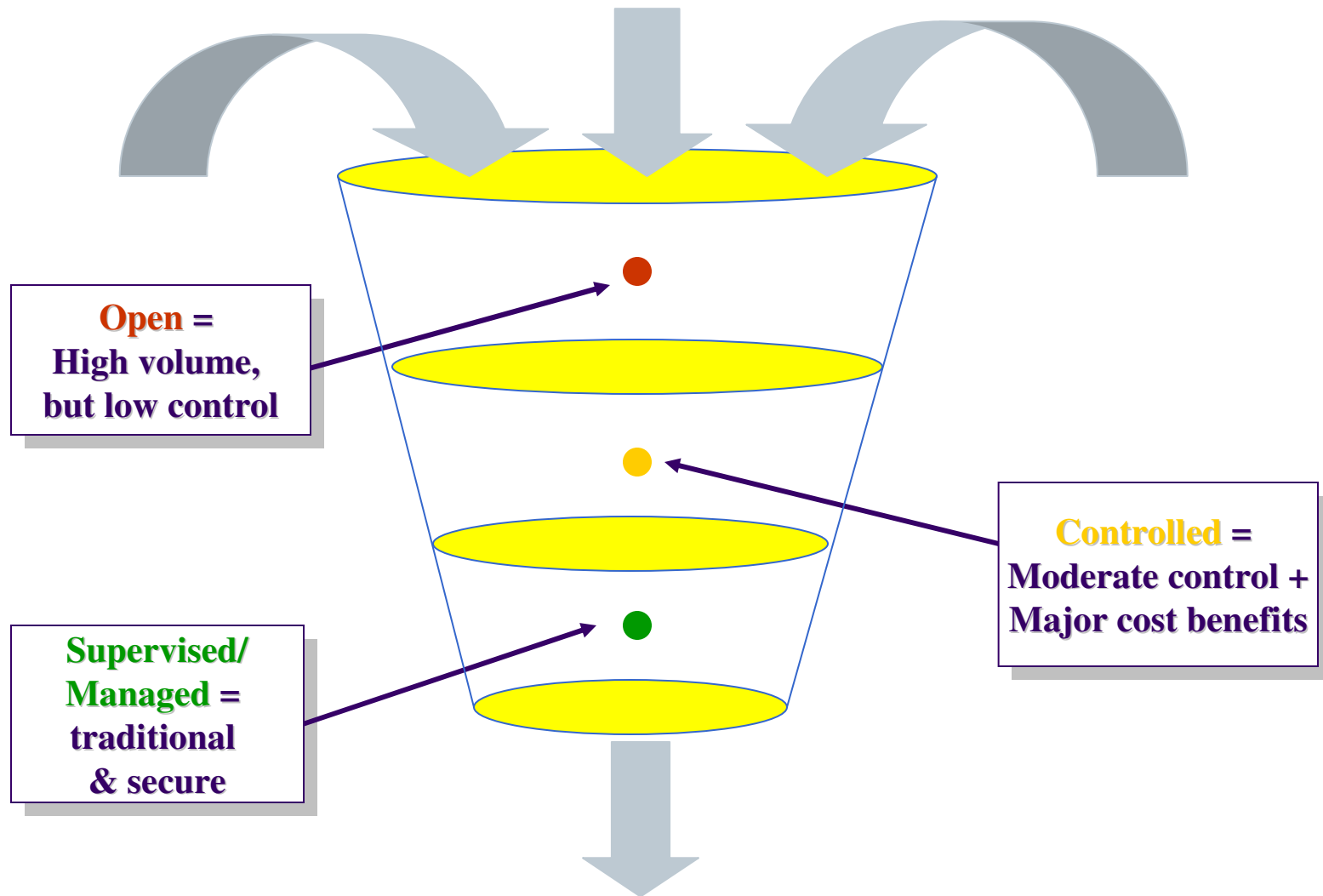
<p>1. Open</p>	<p>Anyone can access and complete test</p>	<p>No user</p>	<p>No human session supervision</p>
<p>2. Controlled</p>	<p>Access controlled by</p>	<p>Moderately secure mode</p>	
<p>3. Supervised</p>	<p>Access controlled by login process, location insecure</p>	<p>Supervisor has candidate login &</p>	<p>Human session supervision</p>
<p>4. Managed</p>	<p>Location controlled (e.g. Test Center)</p>	<p>Secure modes</p>	

Bartram, 2001

> Testing Zones in the Job Recruitment and Selection funnel



> Testing Zones in the Job Recruitment and Selection funnel





International Test Commission

International Guidelines on Computer-Based and Internet Delivered Testing

- Background
- Test Developers
- Test Publishers
- Test Users
- Official Translations
- Acknowledgements
- References
- Appendix
- Glossary

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- Background
- Test Developers
- Technological Issues
- Quality Issues
- Control Issues**
- Security/Privacy Issues
- Test Publishers
- Test Users
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International Test Commission

International Guidelines on Computer-Based and Internet Delivered Testing

Provide appropriate levels of control over CBT and Internet testing

Detail the level of control over the test conditions

1. Document the hardware, software, and procedural requirements for administration of a CBT/Internet test.
2. Provide a description of the test-taking conditions required for appropriate CBT/Internet test administration.
3. Design the CBT/Internet test to be compatible with country-specific health and safety, legal, and union regulations and rules (e.g., time on task).

Detail the appropriate control over the supervision of the testing

1. Document the level of supervision required for the CBT/Internet test.
 - **Open mode** – No direct human supervision required
 - **Controlled mode** – Although direct human supervision is required, the test is made available only to known test-takers
 - **Supervised mode** – Test users are required to log on a candidate and confirm that the testing was administered and completed correctly
 - **Managed mode** – A high level of human supervision and control over test-taking conditions is required (as in a dedicated test centre)

> What are the risks associated with remote administration?

- Practical issues
 - > Authentication of candidate ID is difficult
 - > Difficult to control conditions under which test is taken
 - > Monitoring of behaviour during the test is difficult
 - > Design of test software needs to be very robust
 - > Item content needs to be protected against overexposure
 - > Candidate perceive a lack of support
- Ethically, issues relate to:
 - > Risk of cheating and resulting inequity
 - > Risk of candidates being unfairly disadvantaged by having to complete the test online (e.g. digital access issues)

> Modes are already changing: Making remote administration more secure

- Online Controlled Mode is becoming more secure as current technologies become embedded:
 - > Remote identification and authentication: through thumb print or retinal eye pattern.
 - > Remote supervision through CCTV/webcam monitoring - phone/TV/PC will merge to a common I/O device
 - > Use of data forensics to detect response pattern aberrance.
 - > Item and test generation technologies to reduce the risk of compromising tests through item exposure
- Already seeing systems for 'remote proctoring' (e.g. ATP 2006 conference). Caveon, Kryterion, Pearson/VUE

➤ Updating the ITC classification

1. Open unproctored	Insecure mode		
2. Controlled unproctored	Moderately secure mode		
3. Remote Proctored	Secure Modes		
4. Local Proctored			
5. Fully Managed			

> Managing and mitigating risks in unproctored remote online ability testing.

- The use of 'honesty contracts'
 - > Clarifying process and informing consent
- The use of verification tests
 - > Short-listing on the basis of a full length unproctored test (randomised construction to minimise item exposure issues)
 - > Short-listed candidate given a short 'verification test' to check that the data is likely to be their own.
 - > Non-verified tests flagged and further checks carried out
- Use selection strategy that ensure 'cheaters do not prosper'
 - > Use fixed cut-score and not top-down selection
 - > Use low cuts based on minimum requirements.

> The world is changing

- Internet delivered testing is rapidly increasing.
- Test distributors are working towards the remote management of proctoring/supervision in assessment in the work and organizational field.
- The traditional 'test user' is being cut out of the loop.
- The new 'test user' is the line manager not the 'expert' and will select instruments on the basis of the value provided by the report.
- A new challenge is to make sure that reports, not just tests are valid.

> Providing feedback on results

**Does test
produce valid
scores**

Standard
validation
paradigms

Do test scores
correlated with
criterion X?

**Expert User
provides
interpretation
and checks
recipient's
understanding**

> Rethinking our validation paradigm

**Does test
produce valid
scores?**

Standard
validation
paradigms

Do test scores
correlate with
criterion X?

**Does system
interpret
scores
correctly?**

Comparison
with expert
judgements

Validity of
decisions

**Do recipients
interpret
reports
correctly?**

Consequential
validity

Feedback from
recipient

> Issues for users of remote administration to address

- You need to ensure that:
 - > People have been provided with adequate information about the test and the role it has in the assessment procedure if they are to exercise informed consent.
 - > There are mechanisms to deal with issues or problems arising during the course of test administration (e.g. a telephone support number).
 - > People are provided with clear and meaningful feedback.
 - > The risks associated with cheating or faking are adequately managed, in order not to be unfair to those who respond honestly



Questions?