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Teaching Assessment: Evolved
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Agenda

- Introduction
  - What do you know about Q-interactive?
  - What programs are available for trainers?
  - What does a unique technology like Q-interactive mean for training programs?
  - Things to think about

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Our Work Flow - Before and After…

Traditional Assessment World

The World of Q-Interactive

Light Weight
Minimal Test Components
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2014 Instrument Library

Selected Subtests:

Full Instruments:

- WAIS-IV
- WPMI
- KTEA-3
- WMS-IV
- CTT
- CBCL
- CMS
- NFER
- PPVT

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What is a Disruptive Innovation?

- disruptive technology is different than sustaining technology
- sustaining technology builds upon what is already in place, such as a better feature set or better performance
- Scoring assistants

(From The Innovator’s Dilemma, Professor Clayton Christensen of Harvard Business School)

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Adopting Technology

- It took almost 62 yrs for the telephone to be adopted by 80% of the USA population.
- It took about 15-20 yrs for the cell phone to be adopted by 80% of the USA population.
- Smartphones introduced sometime between 1994 and 1997.
- About 15 yrs later over 50% of all cell phone users have a smartphone – mostly Android and iPhone.
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**Adopting Technology**

Text Messaging
- First SMS message sent December 1992
  - It read, “Merry Christmas”
- Text first commercially available in 1996
- By 2007, 74% of all mobile phone users worldwide actively texted.

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**Q-interactive is a Disruptive Innovation**

“... Disruptive technologies may be attractive initially only to emerging markets, but that can change.”

*Jim Sluss, OU electrical and computer engineering professor*

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**Equivalency Studies**

**Process**
- Develop efficient study designs
  - Choose dependent on interface, test constructs, etc.
- Set a standard for equivalence:
  - Effect size < .20, slightly more than ½ scaled score point on Wechsler subtests
- Extensive training of examiners
- Video recording of data collection
- Investigations of any observed format effects:
  - Deeper dive into data
  - Review videos for changes in examinee or examiner behavior
- Analyze user interface for potential problems

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Equivalency studies to date

Equivalent Groups

Test/Retest

Dual Capture

See Technical Reports at helloQ.com

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Summary

Implications of results

• In general, digital presentation did not affect performance of nonclinical examinees on these tests

• Small benefit of digital presentation for children on WISC-IV Matrix Reasoning and Picture Concepts

• These effects should be kept in mind when interpreting results, but no score adjustment recommended

  • Overall effects on subtest very low (.5 - .75 scaled score points)

  • Impact on index scores and FSIQ minimal (0.1 point lower on WAIS-IV, 1.5 points higher on WISC-IV)

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Summary

Lessons learned and future directions

• Training is important

  • Examiners found the digital format easy to learn, but needed multiple practice administrations to become proficient

  • Once proficient, digital administrations were efficient and accurate

  • Supports hypothesized benefits of computer-assisted administration

  • The study methodology was robust across samples and designs

  • Suggests that in the future, these findings can be generalized to tests that share common design features
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Platform security
Q-interactive addresses security on two fronts:

- **In Use**
  - This ensures the security of the digital medium and allows for secure access to client data, even through firewall boundaries.

- **Data Transfer**
  - Q-interactive's data transfer protocols ensure seamless use of the system with state-of-the-art encryption techniques and secure connections.

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How is data secured?

- Security compliance with the standards established in the HIPAA and FERPA Security Regulations and in accordance with the HITECH Act applicable to Business Associates.
- All transfers to and from the web application to the tablet are automatically encrypted, using industry best practices.
- Client data is transferred from the tablet, using a secure connection, and stored in an encrypted Pearson database.
- A variety of administrative, physical, and technical safeguards are in place on Q-interactive to protect your personal data.

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Data Storage

- Examinee data is stored on computer servers located in Toronto, Canada.
- Back-up servers are located in Vancouver, Canada.
- Why?
  - The data is stored in Canada because of Canadian law, which has a global reputation for the protection it affords to personally identifiable information. Unlike the United States, Canada is recognized by the European Union as meeting the adequacy requirements of the European Union for protection of personal data.
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CHALLENGES IN TRAINING WHERE TECHNOLOGY IS INVOLVED

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Ethical Principles (American Psychological Association, 2002)

- Psychologists must be competent in the technologies they use in practice

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Q-interactive Training Tools

- Webinar Series
  - Basics of Construction
  - iPad settings
  - Using Q-interactive Central
  - Assessing Clients with Q-interactive
  - Reviewing Scores, Archiving, and Exporting data

- On Your Own Video Tutorials
  - found on www.qiactive.com

- User Guide for Step-by-Step overview of Q-interactive

- Support Tab with Tutorials
Will Q-interactive change how we teach assessment?

Different now vs. Future?
What do you anticipate as being impacted?

EXAMPLES OF IMPACT ON TRAINING

Assessment Tools – Timer

Timer counts up

Timer counts down

Elapsed time. (Timer will continue to track the time once alloted time has been reached. Time will display in red when it is within 10 seconds of the time limit.)

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Recording and Scoring – Block Design cont.

- Event Buttons located below the timer can be used to indicate:
  - rotations,
  - constructions that contain gaps greater than 1/4" between the blocks, or
  - breaks in configurations.

NEPSY-II Inhibition Capture Screen

Supervision and WiFi

- Data saved after each item when examiner offline
- not synced to a server, just the Assess app.
- "Remove" removes a case from the iPad permanently, whereas sync keeps the case on the iPad but still sends the data to Central.
- Being online provides the added benefit of syncing to the server real time
- helpful where student is conducting the testing; supervisor can see data come in real time.
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**How Do I Get Started?**

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**Getting Started**

- Funding
  - Student device(s)
  - Lending library
  - Technology grants

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**Teaching Strategies**

- Train using traditional means + digital
- Implications of digital first then traditional paper and pencil or vice versa?
- Simultaneous learning opportunities.
- Coordinate with practicum supervisors
- Take the journey together
Potential Assignments

- Compare-contrast your how you learned using digital or paper and pencil
- Paired learning: observe and discuss the behavior a test administration digital vs. paper and pencil
  - General confidence
  - Interactions w/ client
  - Accuracy
  - Observation possibilities

Not just for assessment courses

- The ISSUES pertaining to electronic records and the use of technology in practice can and should be covered in “professional practice” symposia
  - How can you help your students become educated consumers of the tools they select?
  - What questions should they ask?
  - How does it impact your responsibility to your client?

Potential Research Studies

- Performance of clinical/special groups vs. matched control
- Impacts on practice
- Examinee preference and engagement studies
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To do list for trainers

- Secure technology
- Involve community supervisors
- Practice
- Review syllabi and assignments

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Things to Remember

1. Focus on the role of assessment and not the role of technology.
2. Practice, practice…
3. Update your devices at regular intervals or when prompted.
4. Update your online software when prompted.
5. Keep a tab of frequently used links to manuals, videos, tutorials, Help Desk.
6. Accurately label devices for retrieval.
7. Utilize the security features of the device and software.

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Things to Remember (cont)

9. Ensure that you have all the necessary materials, time, and resources set aside before beginning digital assessment training.
10. Allow plenty of time for practice and testing the limits of the technology.
11. Expect a learning curve with digital assessment just like you would with any other new course offering.
Practical Considerations for Trainers

- What to teach?
- When to teach it?
- How to teach?
- How will mastery be demonstrated?
- In what context or role do I teach?
- University policies
- State regs
- Future vs. present

Learn more about Q-interactive at www.helloq.com/home
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