Digital Module 28: Unusual Things that Usually Occur in a Credentialing Testing Program

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Module Abstract

Formal graduate education in a measurement related field provides a solid foundation for professionals who work on credentialing examinations. Those foundational skills are then expanded and refined over time as practitioners encounter complex and nuanced challenges that were not covered by or go beyond the context described in textbooks. For instance, as most of us who work on operational testing programs are (sometimes) painfully aware, real data can be very messy. Often unanticipated situations arise that can create a range of problems from threats to score validity, to unexpected financial costs, and even longer-term reputational damage. In practice, solutions for these unanticipated situations are not always straightforward, often requiring a compromise between psychometric best practices, business resources, and needs of the customer. In this module we discuss some of these unusual challenges that usually occur in a credentialing program. First, we provide a high-level summary of the main components of the assessment lifecycle and the different roles within a testing organization. Next, we propose a framework for qualifying risk along with various considerations and potential actions for managing these challenges. Lastly, we integrate this information by presenting a few scenarios that can occur in practice that should help learners think though applicable team-based problem-solving and better align recommended action from a psychometric perspective given the context and magnitude of the challenge.

Keywords: Credential/Licensure Testing, Assessment Design, Assessment Challenges, Threats to Score Validity, Operational Psychometrics

Learning Objectives

Upon completion of this ITEMS module, learners should be able to:

- Understand different components of the assessment lifecycle
- Explain different units, roles, and handoffs within a testing organization

- Recognize potential risks associated with challenges that commonly arise for credentialing testing programs
- Identify when testing challenges are likely to create validity concerns

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Brief Description of each Section

The digital ITEMS module is divided into the following sections, which can be reviewed sequentially or independently.

- **Section 1 - Assessment Lifecycle**: This first section presents a high-level summary of the main components of the assessment lifecycle from defining a test blueprint to score reporting. This should help learners identify, and understand how each of these components uniquely contributes to the assessment lifecycle, and be able to recognize the critical steps within each component.
- **Section 2 - Roles within an Assessment Organization**: This section presents the relevant distinct roles within a testing organization, the major responsibilities of each role, and how they map onto the assessment lifecycle.
- **Section 3 - Qualifying Risk**: In this section we present a framework for qualifying levels of risk in terms of threats to score validity. Several examples are provided to help the learner distinguish different levels of risk. For instance, a minor risk wouldn't impact score utility or broadly perpetuate any negative perceptions of the testing organization. Alternatively, a major risk would have a direct impact on reported results, potentially causing misinterpretation, erroneous decisions, and dangerous actions.
- **Section 4 - Considerations and Actions**: In this section we discuss the steps for investigating an issue to articulate the level of risk, how each role might be involved, and appropriate action steps. Both statistical and business considerations are discussed. Additionally, an illustrative example is provided for which the considerations and actions differ based on the level of risk.
- **Section 5 – Example Scenarios**: In this last section, learners are presented with three scenarios, each highlighting a different set of challenges. Learners are asked to consider which aspects of the assessment lifecycle are impacted, which roles are involved in addressing the challenge, the level of risk, and relevant considerations and actions.

In the portal site, you can also find video version of the core content as well as a handout with all core slides along with other material.

Audience

This module is designed for anyone who is interested in learning more about the interaction between psychometrics, risk management as it relates to assessment, and the practical challenges associated with designing and delivering a credentialling testing program. For example, graduate students may benefit from learning more about the assessment lifecycle and various roles within

the context of an operational testing program. Current testing practitioners may find it useful to consider examples of how an appropriate solution is conditional on the level of risk. Academics may find this module to be a useful resource for their students in providing broad exposure to various career paths. Regardless of the type of learner, we hope you enjoy the module and find this to be a realistic presentation of the unusual things that usually occur in a credentialing testing program.