DESIGNING A PHYSICAL SELECTION TEST: A NEW APPROACH

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BACKGROUND:

Physical Selection Tests (PST) are assessments of an individuals physical ability to perform job-related tasks and are currently used in many physically demanding occupations. While PST are presently implemented in organizations the available literature on PST design and development is currently incomplete. Without a structured and well articulated processes of designing a PST, the PST may not comply with employment legislation.

- There is currently no comprehensive methodology to design a new PST
- Existing PST have been unclear when describing the process of creating a PST from job tasks
- A verifying phase of a PST has not previously been reported

Describing and quantifying the job

Designing the new PST

Verifying the PST back to the job

- Conduct a task inventory of all job tasks incumbents perform
- 2. Collect subjective and objective data to quantify these job tasks
- 3. Identify job tasks characteristics
 - Physically demanding
 - Operationally important
 - Frequency
 - Duration
- 4. Identify the essential job tasks which the PST will be based upon
- 5. Use list of essential job tasks to develop *criterion job* tasks



- A panel of agency and researchers whom will view video footage of the criterion job tasks to identify and quantify the percentage of contribution of each job tasks
 - Core actions/ movements
 - Core muscle groups used
 - Individual or group tasks
 - Plane of motion
 - Fitness component
- Allocate a generic or job-based test component or multiple test components for each critical job task
- Indicate the relationship between the test(s) selected and task



- 1. New PST prototype will be shown to a agency panel to ensure the prototype PST meets the agency resource capabilities and is feasibly able to be implemented
- 2. Video of the PST prototype will be imbedded in a online survey and sent to incumbents
- Incumbents will *verify* the PST by providing a rating of agreement of the PST operational fidelity to their knowledge of the job



Criterion Job Tasks:

"Tasks which represent one or more 'on the job' duties. Criterion job tasks are often used when the actual job task is variable in nature or performed under variable conditions. Criterion job tasks are standardized job tasks which have a measurable performance element."

Job-based Test Components

"Physical Selection Tests can be composed of multiple or single test components. These test components can be generic i.e. pushups or job related i.e. simulated raking task. Job-related test components often utilize similar movement patterns and equipment as experience 'on the job'"

Verification

"When measures of ability to perform the job are assessed, it is important to ensure the PST is assessed for fidelity to the job. Operational fidelity processes will provide an indication of the agreement on the appearance, movements, durations, etc. between the job and the PST."



