



SOUTHERN CALIFORNIA
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***ASSESSING THE SOFTER SIDE OF TECHNICAL
JOBS: INTRODUCTION OF PERSONALITY
ASSESSMENT FOR TRANSMISSION SYSTEM
OPERATOR***

Jeff Gust

Southern California Edison

Warren Bobrow, Ph.D.

The Context Group

SOUTHERN CALIFORNIA EDISON

- ❑ Electric Utility company providing the generation, transmission and distribution of electrical services.
- ❑ Approximately 13,000 employees.
- ❑ Serving 11 million people within a 50,000-square-mile area in central, coastal and Southern California.

Presentation overview



- ❑ Looking to improve the selection system for Electrical Transmission System Operators.
- ❑ Introducing personality assessment and a job simulation to a traditionally technically oriented job.

Transmission System Operator

Responsible for the safe and reliable operation and maintenance of the companies electric transmission system

- ❑ Prepares and administers programs and orders for the switching of electrical load.
- ❑ Projects and monitors electrical load and usage.
- ❑ Evaluates and responds to routine and emergency trouble situations.

Management issues regarding Transmission System Operators performance

- ❑ Multi-tasking several problems.
- ❑ Low motivation toward working long hours and in stressful conditions.
- ❑ Poor attitudes toward serving the customer needs.
 - * situations requiring these skills have become more frequent due to company efforts to increase competitiveness, generally requiring more responsibility of the operators

Job Observations

- ❑ Technical environment
- ❑ Operations center includes:
 - ❑ projection screens
 - ❑ 3-4 computer terminals
 - ❑ phone systems
 - ❑ radio systems
 - ❑ paper based maps and activities logs
 - ❑ audible alarms

Previous Selection System

Aptitude Battery

- ❑ Paper and pencil
- ❑ Mechanical reasoning, assembly skills, reading scales and tables, computation, reading comprehension

Knowledge Tests

- ❑ Electrical theory, basic physics, safety knowledge, routine and emergency operating procedures and instrumentation

Personality Tool

- ❑ Measured those behaviors needed for position
- ❑ On - the - job behaviors
- ❑ Face valid
- ❑ Criterion validated across several industries and positions

Multi-tasking Simulation

Objective was to simulate the operators control center environment

- ❑ Test-taker in a decision-making position
- ❑ Required to access several computer and paper-based documents and maps
- ❑ Utilizes various forms of media
- ❑ Fields in-coming voice messages and leaves out-going voice messages
- ❑ Resolves simple to complex issues

Validation Study



- ❑ Concurrent validation study with 100 participants
- ❑ Supervisor job performance ratings
- ❑ Efforts were made to collect incumbents previously collected selection test scores

Results

Correlations between supervisory ratings and selection test scores

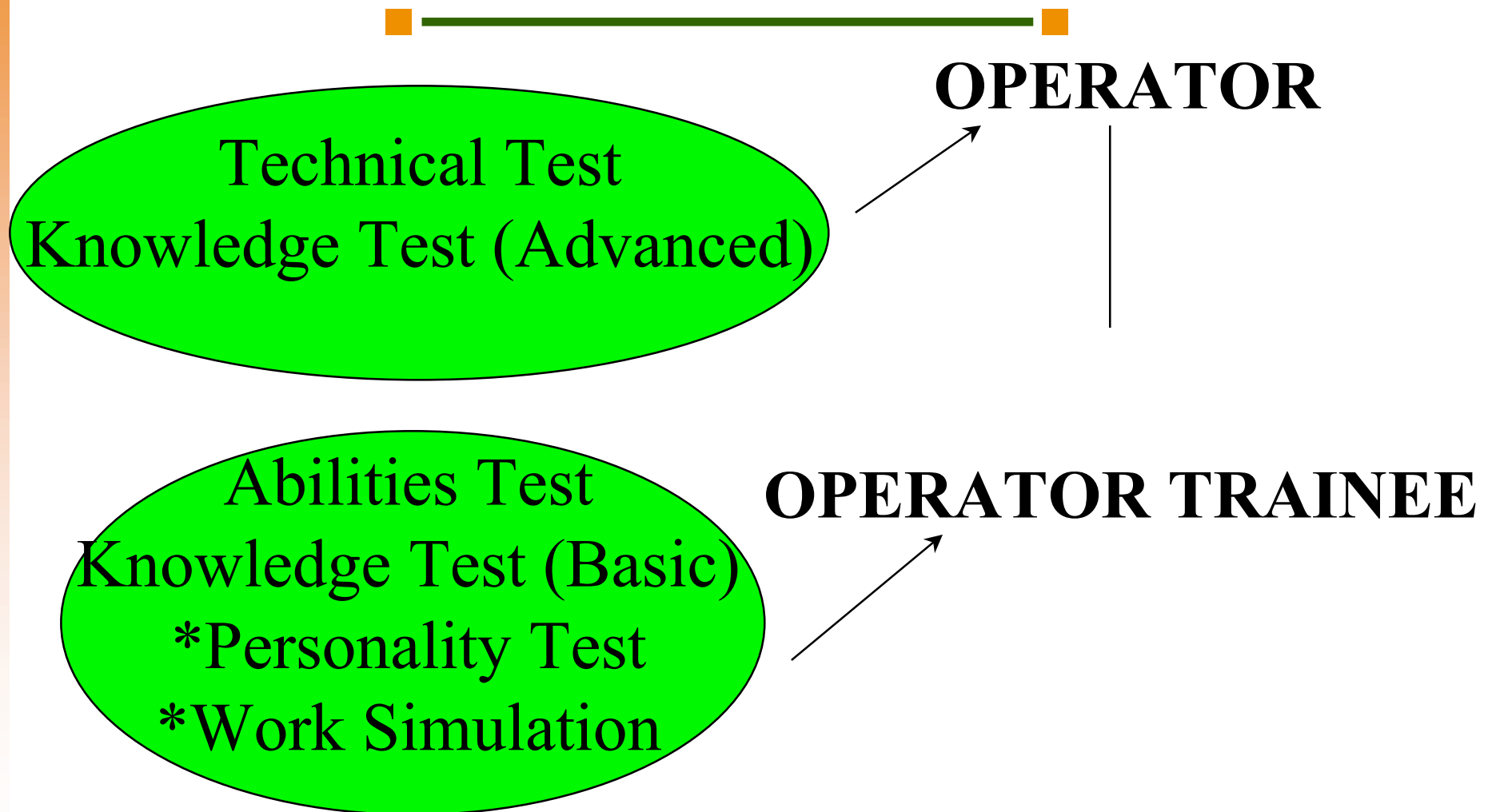
	R_{xy}	p	n
WorkDrive	.27	.01	82
Toughmindedness	.22	.05	81
Customer Service	.23	.04	82
Job Simulation	.19	.09	77
Abilities Test	.30	.04	46

Results

Regression model, new tests predicting Supervisory Job Performance ratings

	R_{xy}	R^2	p
Personality Block	.38	.15	
Job Simulation Block	.46	.21	.02

Revised Operator Selection System



*newly added tests

Conclusions



- ❑ Moving toward predicting a broader scope of job performance
- ❑ Limited in ability to distinguish between usefulness of past tests versus new tests