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Quality of Daily Life Solutions

Online Assessment for Hourly Applicants: What's the Risk?

David Pollack, Ph.D., Sodexo
Julia Bayless, Ph.D., Sodexo
Neena Gopalan, Ph.D., Sodexo
John Curtis, Ph.D., APT
Peter Rosiere, Sodexo



Sodexo is the leading Quality of Daily Life Solutions company in North America, delivering On-site Service Solutions

- Revenues: \$8 billion
- Clients: 6,000+
 - Corporate Services
 - Schools K-12
 - Universities & Colleges
 - Hospitals
 - Nursing and Retirement Homes
 - Government and Defense
 - Remote Sites
- Employees: 120,000



○ Business Impact in the U.S.

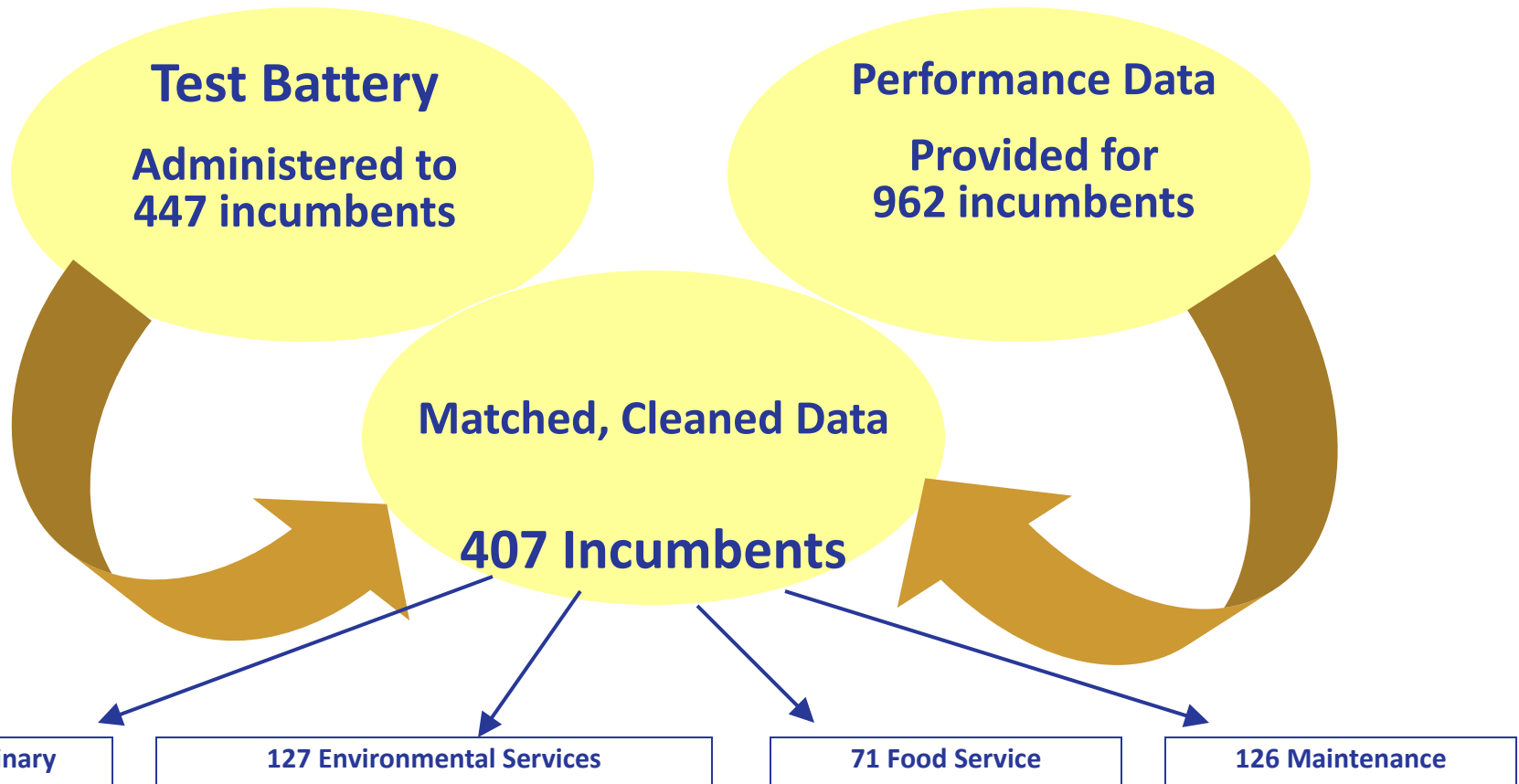
- \$183 billion annual cost for 3.2 million disabling injuries
- Economic impact of each disabling nonfatal work injury: \$48,000 (National Safety Council)
- 1.2 million nonfatal occupational injury/illness cases requiring away days to recuperate
- 5,804 work-related fatalities, 4.1 million nonfatal occupational injuries and illnesses

○ Effect of Pre-Employment Assessment

- Research shows that employees' *safety motivation* and *conscientiousness* are linked to reduced accident levels
- Safety motivation of hired employees correlates very strongly with safety performance

- **Sodexo's Risk Management team goals:**
 - reduce the number of accidents occurring in the field
 - ensure the workforce is safety-conscious
 - decrease workers comp costs

- **Sodexo's Education Services market segment was interested in piloting and validating a selection process for frontline employees**
 - Four APTMetrics biodata scales
 - Agreeableness
 - Conscientiousness
 - Customer Service
 - Safety Orientation



1. Professionalism & Attendance
 2. Customer Service
 3. Productivity
 4. Safety (and Sanitation)
 5. Stress Tolerance & Flexibility
 6. Communication
 7. Teamwork
 8. Initiative
 9. Dependability
 10. Overall Performance
- All performance dimensions rated as important to all jobs
 - Overall, very few significant differences between race, age, and gender groups

- **APT developed scales to predict Sodexo Frontline job performance**
 - Agreeableness
 - Conscientiousness
 - Customer Service
 - Safety Orientation
 - Safety Orientation scale was designed to measure propensity to behave safely and in compliance with regulations
- **Scales scored into bands – fail, low pass, pass, high pass**
- **Psychometric analyses were performed on all collected test data**

- **Very favorable: all scales significantly predicted all different aspects of job performance**
 - Conscientiousness predicted Results Orientation the best ($r=.31$) and Safety ($r=.20$)
 - Agreeableness predicted Communication ($r=.23$), Teamwork ($r=.25$) the best
 - Customer Service predicted Customer Service ($r = .25$) the best
 - Safety Orientation predicted Safety ($r=.20$) the best

Frontline Validation Results

Scale By Job Family



- **Conscientiousness strong predictor for Culinary and Food Service; best for Environmental Services (some r's > .40)**
- **Agreeableness strong for Culinary, Food Services; strongest for Environmental Services**
- **Customer Service good for Culinary, solid for Environmental Services, best for Food Service (some r's > .50)**
- **Safety Orientation best for Environmental Services, solid for Maintenance; good for Culinary, Food Services**



- **Maintenance job performance tougher to predict; initially Safety Orientation only predictive scale**
- **Removing outliers (3 of 126) impacted results**
 - Improved each correlation by .07 on average (up to .13)
 - Conscientiousness now correlates with Results Orientation dimension ($r=.21$), Overall Performance ($r=.24$)
 - Safety Orientation predicts Safety ($r=.31$), Team Spirit ($r=.19$)
- **Without Maintenance outliers (3 of 407) Overall correlations increased by up to .04**

○ Two models examined

- Model 1 = Agree + Cons + Customer Service + Safety
- Model 2 = Agree + (Cons x 2) + Customer Service + Safety

○ Objective to maximize validity and minimize adverse impact

○ Recommend Model 2

- + Model 2 leads to slightly higher validities ($r=+.01$ to $+.02$) with no resulting adverse impact

- **Sodexo Frontline turnover data were collected and merged with validation study sample (N=407)**
 - Screening out those who failed the assessment reduced annualized turnover rate by about 17%
- **Projected “annual” impact assuming 30,000 annual hires**
 - If assessment not used, project 6,060 employees would turn over in 1 year
 - If assessment is used and screens out only everyone in the fail band, project that only 5,040 new hires would turn over in 1 year

- **ROI analyses were conducted on Sodexo claim data merged with validation study sample**
 - Used September 2009 through December 2010 Sodexo claim data
 - Validation study sample merged with claim data
- **Revised Safety scale was created that significantly predicted claim costs**
- **When screening out bottom 1/3 employees on Revised Safety scale:**
 - Reduced by more than 1/3 the number of employees involved in workers comp claims and the average amount of claims

- **Use of the battery expected to result in the selection of higher-performing employees who are more safety conscious**
 - Use of the battery predicted to reduce turnover
 - Savings to the company of (conservatively) approximately \$1,000 per hire
 - Use of the battery expected to reduce the number of accidents and associated workers comp costs
- **Business unit evaluating whether it will use the assessments for selection**
 - Issues to consider/lessons learned
 - Logistics
 - Cost
 - Re-evaluation of assessment scales
 - Communication with stakeholders
 - Change management/organizational culture