

# ROI STUDY

## Identifying Tomorrow's Leaders

For a Healthcare Organization



**EASI**  **Consult**<sup>®</sup>  
Creating Advantage Through Talent Management

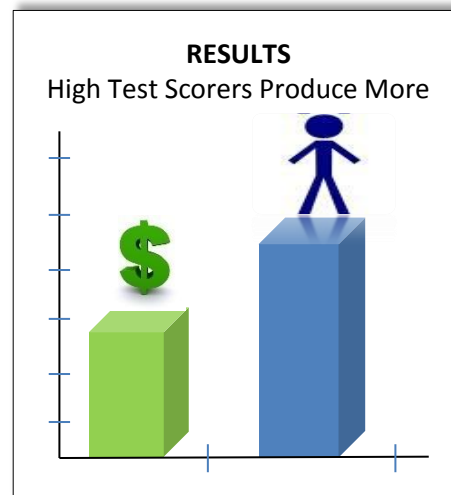
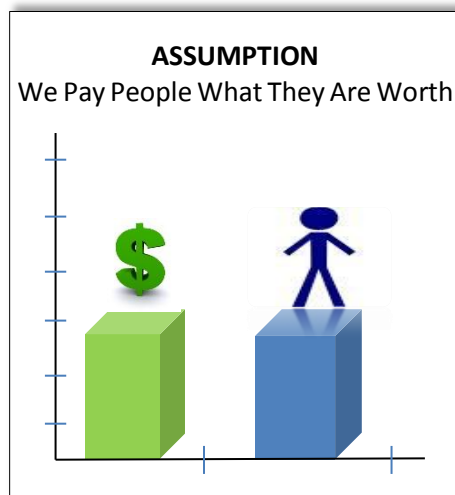
3727 Three Oaks Lane  
Suite #203  
St. Louis, MO 63044  
Telephone: (314)209-9495  
Fax: (314)209-9485  
Web: [www.easiconsult.com](http://www.easiconsult.com)

## Exceptional Value in Pre-Employment Testing with the WSP<sup>®/s</sup> -- April 2013

The *Work Styles Predictor* (WSP<sup>®/s</sup>), for supervisors and managers, is a 67-item test that measures core competencies important to success in a nurse leadership role, such as Managing Oneself, Managing Others, Managing Quality, and Managing the Business. A large-scale criterion validation study was recently conducted on the WSP<sup>®/s</sup> for Sutter Health (including 65 current nurse leaders and their direct supervisors). The average correlation between the WSP<sup>®/s</sup> and job performance was .24, which is statistically significant and falls in the range of most professionally developed pre-employment tests. This number suggests that this instrument can identify applicants who are more likely to be successful on the job. Next, we followed the validation study with a utility analysis.



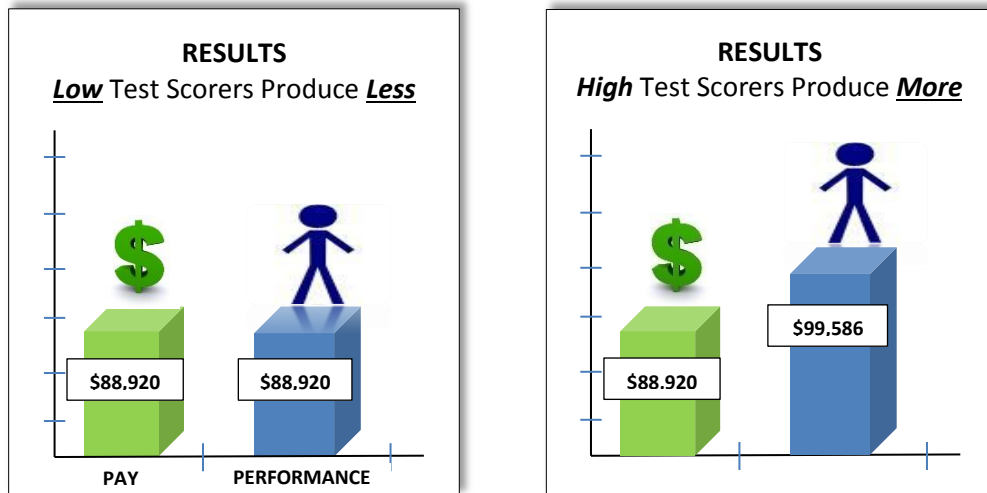
A **utility analysis** measures the return on investment (ROI) for a selection test. This analysis yields a dollar value that indicates how much cost savings will be gained if a particular test is used for selection. In order to accurately assess the ROI, we considered the salary of a Charge Nurse position (\$57 per hour), how much it costs to administer the selection test (\$65), and the relationship between the test and job performance ( $r_{xy} = .24$ ).



The effectiveness of the test was assessed with a sample of currently employed Charge Nurse/Shift Lead or Assistant Nurse Manager/Manager positions from Sutter Health. The test was significantly related to job performance. Based on the information obtained from this organization and using a conservative estimate of an hourly wage of \$57 per hour, a utility analysis was conducted for the WSP<sup>®/s</sup>.

The analysis revealed that if Sutter Health only hired the *top scoring applicants*, they would realize an **increase in productivity on the average of \$10,926 per hire** in the first year of

employment. This indicates that *top scoring applicants* are 12% more productive or effective than lower scoring applicants. This estimate was obtained using a conservative test cost of \$65 per applicant.



$$UA = [N_s * r_{xy} * SD_y * (\lambda / SR)] - C$$

- $N_s$  = number of applicants selected
- $r_{xy}$  = relationship between test and performance
- $SD_y$  = standard deviation of performance – expressed in wages
- $\lambda$  = standardized value of the minimum acceptable score on the test
- $SR$  = selection ratio
- $C$  = cost of testing per person

- Assume applicants selected: **1**
- Relationship between **WSP®/s** & performance:  $r = 0.24$
- Conservative estimated salary: **\$88,920** (\$57 x 2080 x .75)
- Standard deviation of performance – expressed in wages: **\$35,568**
- Standardized value of the minimum acceptable score on the test: **1.28**
- The selection ratio: **.25** (or one hire out of four applicants)
- Test administration costs: **\$260** (\$65 x 4)



[www.easiconsult.com](http://www.easiconsult.com) 1.314.209.9495