

**TECHNICAL REPORT**  
**SUMMARY OF VALIDATION RESULTS**  
**SACS (SELECT ASSESSMENT™ FOR CUSTOMER SERVICE SYSTEM)**  
**FOR CUSTOMER “R”**  
**CSRS (CUSTOMER SERVICE REPRESENTATIVES)**

Matthew S. O’Connell, PhD  
 Director of Technology & Research 2003

**Research Study at CUSTOMER “R”**

The purpose of conducting this Validation Study for Customer “R”’s CSR group is to ensure that the Select Assessment for Customer Service (SACS) System accurately predicts job performance.

To this end, performance data was gathered on a random sample of 900 individuals from two of Customer “R”’s contact centers. This data was combined and analyzed with the purpose of establishing an accurate and reliable CSR profile for Customer “R” to use when selecting new employees into these positions. In addition to this, the base data has been used to provide a foundation to leverage and fast track performance improvement for existing employees.

**Performance Criteria**

There were three primary performance areas evaluated for each of the positions in the study:

1. Supervisor ratings of performance (Perception Data)
2. Ranking of performance based on objective criteria used by Customer “R” (Quality and Productivity)
3. Overall performance that is a combination of the above two measures

The inter-correlations for the three primary performance criteria are shown in Table 1 below.

**Table 1.** Correlation between the Key Performance Criteria used in the study

	<b>1</b>	<b>2</b>	<b>3</b>
1. Supervisor Ranking	.29**	---	
2. Objective Ranking	---		
3. Overall Performance	.75**	.80**	---

## **Findings from Table 1**

The Supervisor ratings of performance on the job are moderately related to the objective performance rankings; which is not uncommon. This is likely due to the fact that performance ratings take into account a broader range of factors. However, because performance in these positions is extremely structured and Supervisors have access to and monitor the hard performance metrics, one would assume that the correlation between their subjective ratings and the objective performance rankings would be higher, e.g. .50.

In this study, overall performance (3) is made up of objective rankings (2) and the Supervisor rankings (1) and therefore, the correlation between this variable and the other two is logically quite high.

Because overall performance (3) takes into account the Supervisor's ratings (1) of performance on the job as well as objective performance criteria (2), it is deemed the most accurate or true measure of an employee's performance.

The correlation between the individual competencies assessed in the SACS system and the three performance criteria are shown in Table 2 below.

**Table 2.** Correlation of Competencies and Key Performance Criteria

	<b>Objective Ranking</b>	<b>Supervisor Rating</b>	<b>Overall Performance</b>
Customer Focus	.10	.26*	.25*
Interpersonal Skills	.14	.10	.19
Ownership	.23	.26*	.30**
Quality Focus	-.06	.32**	.14
Problem Solving	.04	.40**	.34**
Sales Focus	.04	.19	.14
Processing Speed	.08	.32**	.25*
Data Entry	-.04	.26*	.14
Risk Reliability	.40**	.23*	.38**
Typing Speed	.02	.28*	.19
Overall SACS Score	.28*	.48**	.48**

\*  $p < .05$        $p < .01$  (2-tailed)

All correlations are corrected for reliability and range restriction.

As can be seen in Table 2, a number of competency areas were significantly related to performance on the job. The individual competencies appear to rate more strongly to Supervisor's ratings of job performance than to the objective rankings, however, the correlations remain almost as strong with the overall performance criteria.

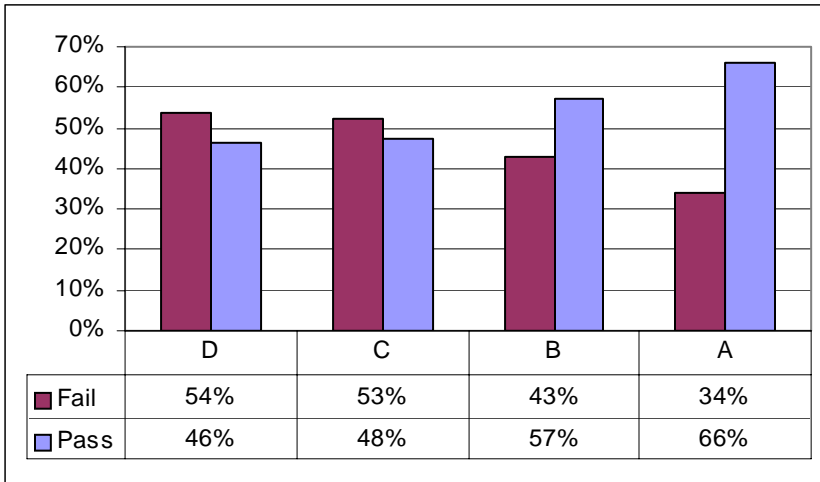
A weighted composite was calculated based on the correlation between competency scores and the overall performance criteria. That Overall SACS Score is shown in the last row of Table 2. As can be seen, the overall variable was significantly and strongly related to all of the performance criteria.

To determine the impact of applying the SACS system to this group of employees, minimum cut-offs currently in use by Customer "R", based on a job analysis, were utilized. The results of applying these individual competency cut-offs along with a cut-off on the Overall SACS Score of 5.9<sup>1</sup> are shown in Table 3 – 5 below.

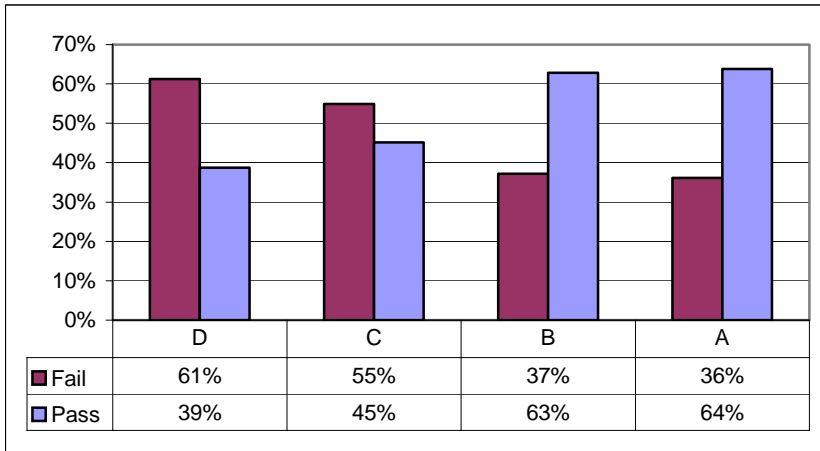
---

<sup>1</sup> An overall cut-off of 5.9 was shown to be the best at accurately differentiating between high and low performers compared with cut-offs at 5.8, 6.0, and 6.1.

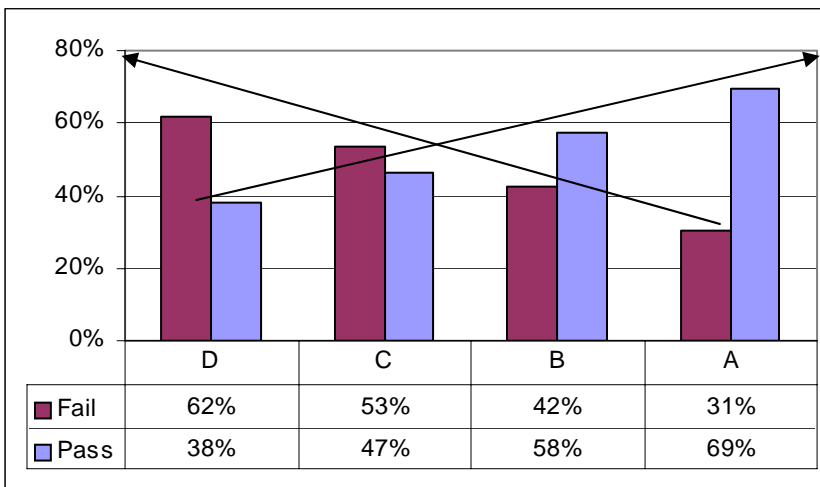
**Table 3.** Comparative Pass Rates Based on Objective Rankings (2)



**Table 4.** Comparative Pass Rates Based on Supervisor Performance Ratings (1)



**Table 5.** Comparative Pass Rates Based on Overall Performance (Objective Rankings combined with Supervisor Performance Ratings)



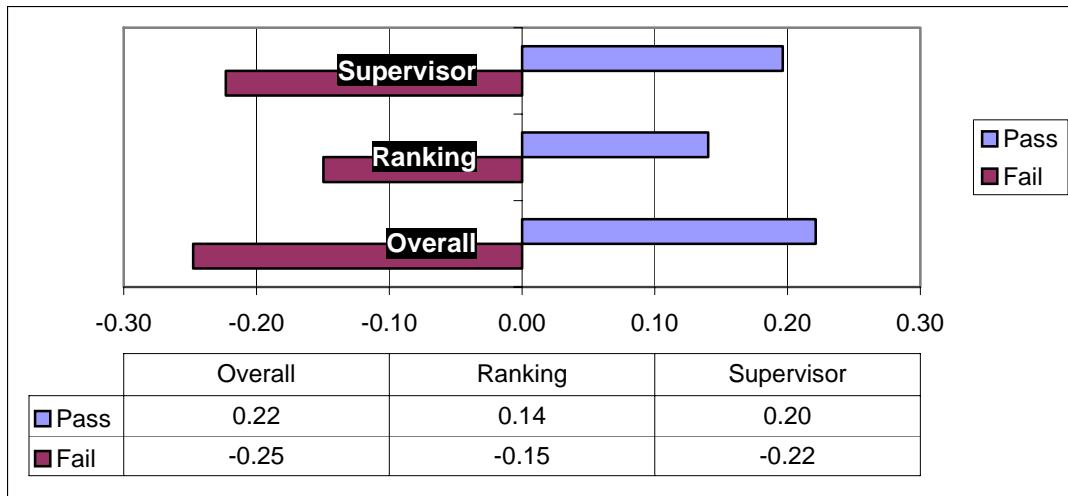
**Findings Tables 3-5**

These charts distinctly show that higher performing agents have a significantly higher pass rate on the assessment compared to lower performing agents. Additionally, the number of high performing agents who fail the assessment is substantially lower than low or medium performing agents. In interpreting such tables, one should look for an increasing pass rate as one moves from low to high performance levels. This pattern was clearly apparent for all three performance criteria.

The most consistent and impressive results are for the Overall Performance criteria Table 5 in which one can plot a clean linear progression wherein the percent passing incrementally increases as you move from D to C to B to A and conversely, the percent failing decreases accordingly.

The percentages in these tables allow us to make some intelligible predictions. For instance, using Table 5, and the Overall Performance criteria, a person who passes the assessment using this profile is almost **twice** as likely to be an “A” performer as opposed to a “D” performer (69% vs. 38%). Conversely, someone who fails to meet the profile is two times more likely to be a “D” than an “A” (62% vs. 31%).

**Table 6.** Standardized performance differences for individuals who pass vs. fail the assessment. Looking at performance using three separate criteria. (incomplete sentence. Not certain it adds value to the previous statement or to introduce the table below. You may want to consider removing or rewording it.)



**Findings Table 6**

This table shows the standardized performance differences for the three performance criteria for the group of employees that would pass vs. fail the profile. Standardized performance is set such that the average is 0 and the standard deviation is 1.

As can be seen in the table, individuals who pass the assessment are, on average, likely to be above average performers whereas those who don't are likely to be below average performers. In standardized terms, where the average performer receives a score of 0, there is between .29 to .47 standard deviations in performance difference for those who pass vs. those who fail the profile.

### **The Potential Impact**

In general terms, a difference of 1 standard deviation in performance ratings is associated with a relative dollar value of 80% of the individual's yearly compensation.<sup>2</sup> Thus, for positions that pay \$30,000 per year, an average improvement of .47 standard deviation is estimated to be worth \$14,100 per person per year. This value manifests itself in faster ramp-up times, improved customer service, higher customer retention and satisfaction, higher sales and improved attendance.

Additionally, the results indicate that using this profile with an overall cut-off of 5.9 will result in:

- A 53% pass rate for current employees (meaning that based on this sample, 53% of the employees tested would meet this profile and 47% would not).
- Job Performance, as rated by Supervisors, is expected to improve approximately 20%.<sup>3</sup>
- Overall Job Performance as a combination of Supervisor ratings and objective data is expected to improve approximately 24%.<sup>4</sup> (*Note: Dollar Value ROI calculated separately*)

### **Irregularities**

No significant irregularities were found

### **Summary and Conclusions**

The results are consistent and conclusively positive. The overall correlations with the various performance measures range from  $r = .28$  to  $.48$ . Additionally, higher performing employees consistently pass the established profile at a higher rate than lower performing employees. Candidates who pass the assessment are **twice** as likely to be outstanding performers (i.e. "A" performers) than they are to be unsuccessful (i.e. "D" performers).

---

<sup>2</sup> Cascio, W. F. (1987). *Applied psychology in personnel management*. (Third Edition), Englewood Cliffs, NJ: Prentice-Hall. Dimension Data (2002) Industry Report

<sup>3</sup> Average rating, on 1-4 scale, for the pass group was 2.73 whereas the fail group was 2.26.

<sup>4</sup> Average rating, on 1-4 scale, for the pass group was 2.71 whereas the fail group was 2.18.

Finally, the results indicate that Customer “R” will likely realize a substantial return on investment in using this selection system to hire employees into the organization.\*

In summary, using this system consistently should result in significant improvements in Overall Performance Ratings, Objective Measures of Performance and bottom line metrics such as: customer satisfaction and retention, and sales.

As with any assessment, this tool should be used as part of the recently designed overall selection system that, amongst other criteria, should specifically assess for job fit, motivational fit and culture fit. Used in this manner, the results shown here are likely to underestimate the overall value of the system.

### **Additional Note**

No selection system is a perfect predictor of future performance on the job. Our goal is to continually strive to increase the likelihood of selecting the best people from the pool of candidates who apply for the job. As can be seen in the results presented above, while the likelihood that someone who passes will be successful is significantly higher than those who fail, there are going to be errors made on both sides of the decision.

### **Conclusion**

1 year later Customer “R” had experienced a 48% improvement in productivity and 50% reduction in attrition, with an overall cost recovery within 8 months.