



## Making Millions More from Your Sales Force: Predicting Success a Year in Advance (Great ROI)

Lawrence P. Clark, Ph.D.  
Larry Clark Group, LLC

Gary Rich  
Rich Leadership

### Executive Summary

This document describes how one client predicated sales success a year in advance, potentially increasing sales by millions with a great ROI. Three validation studies were conducted to develop and document the effectiveness of a pre-employment screening tool for identifying outstanding sales professionals at one of our clients: ABC Corp. This project was undertaken to assure that ABC Corp is able to quickly and efficiently identify candidates that have a high probability of being very successful in sales roles.

Three analyses were conducted for the client:

- ) **Define:** An analysis was conducted to define the client's unique "Success Formula" using the Sales Agility Test (SAT).
- ) **Refine:** The sales performance of a sample of sales people were analyzed to refine the selection point on the SAT.
- ) **Combine:** The full year's sales performance for all of the people hired in the prior year were analyzed to determine real performance against predicted performance based on the SAT. The potential sales increase was millions of dollars.

**First Analysis:** Combinations of SAT scales were calculated and tested to identify the optimal solution for differentiating High performers from Low performers. One composite score was highly valid for Overall Sales Performance. The "Success Formula" composite score is: Persuasiveness + Energy + Achievement + Initiative + Self Presentation – Self Control - Emotional Awareness. The predictive validity for the "Success Formula" was 0.47.

**Second Analysis:** This analysis looked at the link between the "Success Formula" scores and performance on the Annual % of Sales Target data for each individual. If the candidate's score was 69 or higher they were very likely to have results in the higher end of the range. Likewise if their score was 68 or lower they were likely to produce in the lower ranges of the Annual % of Sales Target. Based on that data the selection point for the ABC Corp. Success Formula should be

### The Big Ideas:

1. **Define:** Companies can define a unique "Success Formula" with the Sales Agility Test. This "Success Formula" represents what your very best sales associates are doing more of and less of compared to your average performers.
2. **Refine:** Using the "Success Formula" companies can create and refine a selection point to be used as part of the hiring process for job applicants.
3. **Combine:** SAT scores and performance of current sales people can be combined to assess sales improvement, ROI, etc.



69 or higher in order to hire candidates that are more likely to produce in at the higher end of the Annual % of Sales Target range.

**Third Analysis:** Additional analyses were conducted on the full years' worth of ABC Corp sales data using current employees who were hired in the prior year. As a group ABC Corp people at or above the selection point of 69 significantly outperformed those below the selection point by almost 3.5 to 1 on Overall Performance and 2.5 on Annual % of Sales Target. If ABC Corp had only hired applicants at or above the selection point the potential increase in Overall Performance dollars would have been \$2, 635,000.

**ROI Analysis:** The potential increase in sales represents an ROI of over 2300% based on the total cost of the project. For purpose of illustration let's assume ABC has a 10% profit margin. The increase in sales should translated into additional profits of \$263,000. Using that profit increase to calculate the ROI, the result is a ROI of over a 140%. The ROI will get even higher in the following years as the investment to determine the "success Formula" will have been made. A very impressive return.

### First Analysis: Defining the "Success Formula"

This effort consisted of an empirical validation study in which a sample of current ABC Corp sales employees completed the Sales Agility Test (SAT). Participants were selected as belonging to one of the following three groups based on Overall Performance: High, Middle, and Low performers.

The SAT consists of 176 items and requires about 20 minutes to complete. It assesses individuals on three primary styles of selling: Dynamic, Analytical and Interpersonal. Each of these three styles is measured by five personality scales. In addition, there are measures of Response Fidelity, Retention, and Predicted Sales Effectiveness.

**Results:** A total of 114 participants were included in the analysis of Overall Performance. Combinations of SAT scales were calculated and tested to identify the optimal combination for differentiating High performers from Low performers. One composite score was identified that was highly valid for Overall Performance. The optimum "Success Formula" composite score: Persuasiveness + Energy + Achievement + Initiative + Self Presentation – Self Control - Emotional Awareness worked best. The predictive validity for the "Success Formula" at 0.47 far exceeds the gold standard which is the 0.32 predictive validity of the SAT/ACT in predicting college grades.

Table 1 shows the average scores for the high, average, and low performance groups. Extreme Response Distortion scores were omitted in computing the averages. This includes individuals having scores on Self-Presentation that exceeded 90 or were less than 10.

## Unique Success Formula

The Success Formula is unique to each Company and each sales force within a Company. The Success Formula creates a true competitive advantage that your competitors can never match.



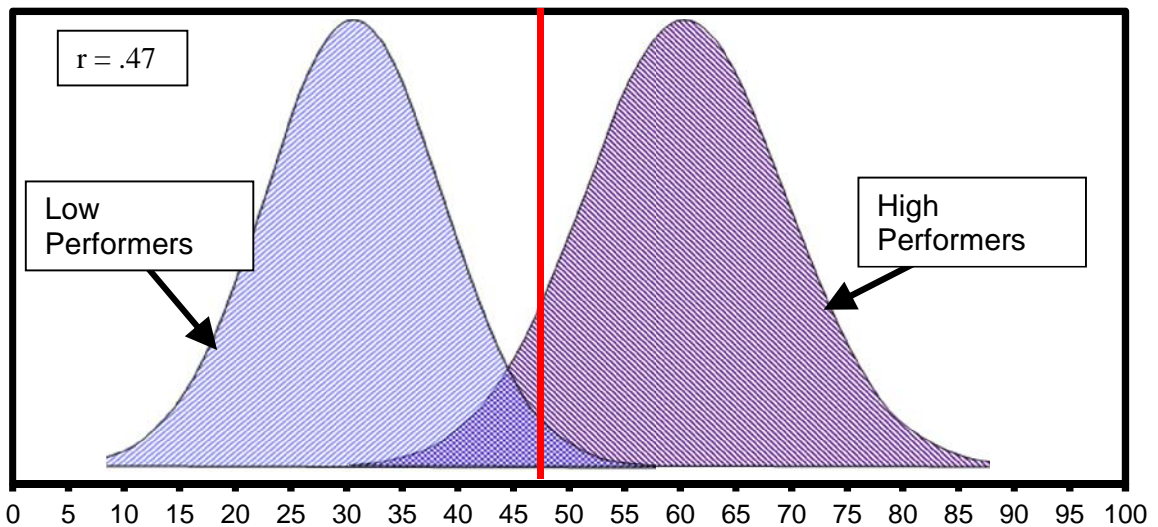
**Table 1: Average Scores for the Success Formula**

	High	Average	Low
<b>Overall Performance</b>	60 (N=36)	47 (N=22)	31 (N=11)

Based on a review of the responses from the High and Low groups it was determined that a selection score of 47 on the “Success Formula” would produce an applicant pool that contained 80% High performers.

Graph 1 shows the frequency distributions for the “Success Formula” for Overall Performance ( $r = .47$ ). This graph shows the distribution of scores for the High and Low performing groups. Also, it shows how the distributions compare to a cut-off score of approximately 47.

**Graph 1: Frequency Distributions for High and Low Groups on the Success Formula for Overall Performance**



**Conclusions:** This study has shown that the Sales Agility Test is a valid and legally defensible employment screening tool. It dramatically enhances the probability of identifying a high performing Sales Associate for ABC Corp.



## Second Analysis: Refining the Optimal Selection Point

The purpose of the second study was to test how well the ABC Corp Success Formula predicted desirable ABC Corp outcomes. In other words did the SAT predict success at ABC Corp after the candidate established a track record of performance? In particular ABC Corp was interested to see if the SAT could predict Annual % of Sales Target and Overall Performance ratings.

**Analysis:** The original dataset from ABC Corp consisted of data on 183 people. The dataset included people who had complete data and others who did not. In some cases people with complete sets of ABC Corp data were not comparable to others with complete ABC Corp data in the data set. So all people with less than a complete set of data were excluded. People with no SAT data were excluded. In the final cut for the analysis only people with an Overall Performance ratings between \$16,700 and \$37,000 were included in the data. People with lower numbers typically were not on the job long enough to have a track record of performance. People with higher numbers appeared to be in one-off situations. This range made for the cleanest apples to apples comparison. The data from 35 people made the final cut.

### The Sweet Spot

Within each Company's Success Formula there is a point, the selection point, where there is a clear demarcation between the high performers and the average performers

Table 2 presents the relationship between performances on the Annual % of Sales Target and the average ABC Corp Success Formula score.

**Table 2: SAT Success Formula and Ranges on the Annual % of Sales Target**

Achievement on the Annual % of Sales Target	Average SAT Success Formula Score
400% and higher	72.8
200% - 300%	73.5
100% - 200%	66.5
0 – 100%	65.9

Table 2 clearly indicates that there is a link between Success Formula scores and success on the Annual % of Sales Target. If the candidate's score is 69 or higher they are very likely to have results in the higher end of the range. Likewise if their score is 68 or lower they are likely to produce in the lower ranges of the Annual % of Sales Target. Assuming the ABC Corp has a large enough applicant flow, the selection point for the Success Formula should be 69 and higher in order to hire candidates that are more likely to produce in at the higher end of the Annual % of Sales Target range.



Table 3 shows what ABC Corp can expect in the way of performance improvement if a selection score was used in the hiring process. Table 3 breaks down the data shown in Table 2 into two groups. Those above and those below a selection point of 69.

**Table 3: Performance Based on Selection Score**

Selection Scores	Average SAT Success Formula Score	Average Achievement on the Annual % of Sales Target
At or Above 69	76.5	304.0%
Below 69	59.3	162.8%

**Conclusions:** Two points can be made. First, the group at or above the selection point out performed those below the selection point by a factor of almost 2 to 1 in Annual % of Sales Target - 304% compared to 162%. The second point is that with any assessment there are going to be people who do score lower on the ABC Corp Success Formula who are in fact high performers. No assessment is perfect. In this data there were 2 people who scored below the selection point who both had Annual % of Sales Target above 400%. If you remove them from the below selection group there is even a greater contrast in the results. The below selection group has an average Annual % of Sales Target of 114.4%. In this case the above selection group outperformed the below selection group by almost 3 to 1 – 304% and 114% respectively.

**Third Analysis: The Bottom-line Question: Did the Selection Point Predict Future Success?**

The purpose of this study was to determine if the selection point generated in the second study could in fact predict performance in the following year. A total of 109 individuals both took the SAT assessment and were hired by the client. The hiring process was the same process that the client had used for years. The results of the SAT were not taken into consideration. As a result the pool of candidates hired had a full range of Success Formula scores.

The question to be answered was: Did the person’s score on the “Success Formula” predict their sales performance over the next year. In short, can the SAT predict performance a year in advance?

**Results:** The 109 individuals were divided into two groups. Those that scored at or above the previously determined selection score of 69 on the Success Formula and those that scored below

## Predicting Future Performance

Ultimately any hiring process, be it interviews, assessments, resume screening, or something else, is designed to predict future success in the sale role.

For this client the SAT predicted success more than a year in advance.

Had the client only hired people at or above the selection score their sales performance would have been almost 3.5 times higher than the people they did hire.



the selection score. Overall performance and Annual % of Sales Target data was collected for both groups. Table 4 presents the results of this analysis.

**Table 4: Actual Performance based on Success Formula**

<b>Success Formula Score</b>	<b>Overall Performance</b>	<b>Annual % of Sales Target</b>	<b>Average SAT Score</b>	<b>Potential increase in Performance \$\$\$</b>
69+ (N=75)	\$109,000	112%	76.9	
<69 (N=34)	\$31,900	45%	60.7	\$2,635,000
Improvement	3.43x	2.48x	16.2 points	

**Conclusions:** As can be seen from Table 4, those people at or above the selection score clearly outperformed the group below the selection point. The high scoring group did not just outperform the lower scoring group, they did so by multiples of the performance of the lower performing group. In dollar terms the high scoring group generated almost 3.5 times as much money. In addition, the high scoring group outperform on Annual % Sales Target by a factor of almost 2.5 to 1. Clearly impressive results.

**Remember:** This difference in performance was predicted a year in advance by the individual's performance on the Success Formula. Had the company changed their hiring practices and only hired candidates at or above the selection score the newly hired sales associates would have generated an additional \$2,635,000 in sales. This represents an ROI of over 2300% based on sales and over 140% ROI based on profits. In subsequent years the ROI will be even higher.