



»TalassureSMMX

Industry: Sales

Case Study

An Analysis of Salespeople within
the Technology Industry by Talexes LLC

Abstract

Talexes employee assessments measure behavioral traits that most heavily affect a candidate's performance on a job. The following case study, conducted by Talexes, measures assessment data in order to analyze the correlation between TalassureMX Job Match scores and General Performance of candidates in two distinct sales roles. The primary objective of this study is to improve and standardize the performance of the selected sales organization. Performance indicators that are pivotal to the sales roles were provided. Six performance traits are measured and compared to Success Patterns in order to obtain the Job Match scores. The data collected shows a positive significant correlation between the two variables. The results are analyzed using linear regression and ANOVA. TalassureMX Job Match explains 32% of general sales performance in Sales Position A and 27% in Sales Position B.

Introduction

Employee assessments are often utilized for assessing an individual for hire. Some assessments focus on identifying skills while others identify behaviors and/or emotional intelligence. Krumboltz & Vidalakis found that a deeper purpose can be served by these tools. Use in career counseling, performance problem identification, suggestion of alternative pathways for candidates, and stimulation of action are some of the dynamics that put value into the employee assessment process. (Krumboltz et al, 2000). Their additional finding, which shares the most relevance with the Talaxes assessment, is that assessments can also facilitate cognitive, emotional, and behavioral learning, with emphasis on the behavioral aspect.

The employee assessment utilized in this study is the TalasureMX. This behavioral assessment measures personality traits and a measurement of cognitive ability that, when added together, create a job match score. Variables and terms of the assessment and its results will be defined in the Method section.

The intended purpose of this study is to identify what correlation, if any, exists between Job Match percentage and General Performance ratings. Talaxes has hypothesized, based on previous assessments and data, that a higher job match percentage will have a positive correlation with General Performance ratings.

Participants

Overall a total of 124 candidates in Sales Role A and 29 candidates in Sales Role B participated in the study. The participant pool utilized in the data analysis consisted of candidates with a minimum of 2 years' experience in their respective roles.

Method

The TalassureMX is comprised of three components: personality, reasoning ability, and interest. The provided answers to these questions are compared to the Success Pattern corresponding to each role, where a Job Match score is calculated, acting as our independent variable. Success Patterns are a culmination of personality traits and reasoning ability measurements that reflect an individual that would be categorized as a top performer in their role. Interest measurements are not used to calculate Job Match Percentage, and thus are not included in the analysis. Job Match scores are displayed as a percentage match to the Success Pattern.

The dependent variable, or General Performance rating, is determined by the client's choice of various aspects of the job—referred to as KPIs—that, when measured and subsequently averaged together, create an overall General Performance score. For exemplary purposes, some of these KPIs may include areas like Product Knowledge, Communication, Productivity, or Customer Relations. Talaxes provides the client with a means of measuring the KPIs chosen by the client, typically on a number-pointed scale.

The assessment measures reasoning ability as well as 6 personality traits; these psychometric factors are combined to create a TalassureMX Assessment Job Match score: *manageability, people contact, attitude, competitiveness, sense of urgency, and take charge*. The table on the following page provides the definition of reasoning ability and each personality trait:

Reasoning Ability	A measure of expected learning, reasoning, and problem solving potential.
Manageability	The tendency to follow policies, accept supervision, and work within the rules.
People Contact	The tendency to be outgoing, people-oriented, and to participate with others.
Attitude	The tendency to have a positive or optimistic outlook regarding people and outcomes.
Competitiveness	The tendency to work toward goals and to try to exceed others' performance.
Sense of Urgency	Tendency to display intolerance and an eagerness for immediate results.
Take Charge	The tendency to strive for control of people and situations and to lead more than follow.

The Success Patterns for both Sales Role A and Sales Role B define the observed range of scores within the pattern for each of these traits. They are as follows:

	Sales Role A	Sales Role B
Reasoning Ability	7 – 9	6 – 9
Manageability	4 – 6	7 – 9
People Contact	3 – 6	7 – 9
Attitude	4 – 7	1 – 3
Competitiveness	3 – 9	3 – 9
Sense of Urgency	3 – 5	3 – 5
Take Charge	6 – 8	7 – 9

You may notice the differences between score ranges for *manageability*, *people contact*, and *attitude*. Optimal *manageability* for Sales Role A is 4 to 6 while Sales Role B is in the 7 to 9. From a statistical standpoint, higher *manageability* for Role B may be justified due to the positive ‘likely to be useful’ correlation [p-value <0.25] with KPIs 3, 4, 6, and the Weighted score while Role A requires a lower level due to ‘likely to be useful’ negative correlations [p-value <0.25] with KPIs 4 and 6.

Optimal *people contact* for Sales Role A is in the 3 to 6 range while 7 to 9 is the optimal range for Sales Role B. From a statistical standpoint, higher *people contact* for Role B may be justified due to the ‘very beneficial’ positive correlation [p-value <0.05] with KPI 3 while Role A has ‘likely to be useful’ negative correlations [p-value <0.25] with KPIs 1, 2, 4, 6, and the Weighted Score.

Optimal *attitude* for Sales Role A is in the 4 to 7 range while 1 to 3 is the optimal range for Sales Role B. From a statistical standpoint, lower *attitude* for Role B may be justified due to the negative correlations with four of the six KPIs while Role A has a ‘very beneficial’ positive correlation [p-value <0.05] with KPI 3.

After completion of assessments, the scores were then analyzed in order to derive comparisons between Job Match percentage and General Performance. In this case, General Performance rating was defined by performers that fell into quartile categories.

Analysis

A bivariate analysis of the data was conducted by comparing two variables: Job Match scores and General Performance scores. As you will see in Figure 1A (p. 8), the ANOVA results for Sales Role A scores show a significant correlation between Job Match score and General Performance. Figure 2A (p. 9) shows the categorization of Sales Role A candidates according to the percentile in which they fall. An 8 percent difference in Job Match translates to a quartile difference in General Performance, while 1 percent Job Match equates to 3.125 percent increase in General Performance. A graph is provided in Figure 3A (p. 10) to show the positive linear correlations.

Figure 1B (p. 8) shows the ANOVA results for Sales Role B scores. A significant correlation was found between Job Match score and General Performance. Figure 2B (p. 9) shows the categorization of Sales Role B candidates according to the percentile in which they fall. An 8 percent difference in Job Match translates to a quartile difference in General Performance, while 1 percent Job Match equates to 3.125 percent increase in General Performance. A graph is provided in Figure 3B (p. 11) to show the positive linear correlations.

These results support Talexes' hypothesis that there is a significant correlation between Job Match score and General Performance.

Conclusion

This correlational study found that a higher Job Match score calculated from the TalassureMX relates to higher General Performance. Although possible outcomes may vary if the sample size changes, it can be reasonably deduced that similar correlations may be presented if the study were repeated with different job positions within the same organization, or within a different organization.

Graphs

SUMMARY OUTPUT										
<i>Regression Statistics</i>										
Multiple R	0.59									
R Square	0.35									
Adjusted R Square	0.32									
Standard Error	2.43									
Observations	22									
ANOVA										
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>					
Regression	1	63.58	63.58	10.80	0.0037					
Residual	20	117.73	5.89							
Total	21	181.32								
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>		
Intercept	- 5.60	6.72	- 0.83	0.41	- 19.61	8.41	- 19.61	8.41		
Job_Match_Sales_A	0.25	0.08	3.29	0.00	0.09	0.42	0.09	0.42		

Figure 1A: Summary output for Sales Role A data

SUMMARY OUTPUT										
<i>Regression Statistics</i>										
Multiple R	0.53									
R Square	0.28									
Adjusted R Square	0.27									
Standard Error	2.58									
Observations	58									
ANOVA										
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>					
Regression	1	144.42	144.42	21.66	0.000020					
Residual	56	373.46	6.67							
Total	57	517.88								
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>				
Intercept	- 3.54	4.13	- 0.86	0.40	- 11.81	4.73				
Job_Match_Sales_B	0.26	0.06	4.65	0.00	0.15	0.37				

Figure 1B: Summary output for Sales Role B data

Job Match	Est. Trendline SUM 6 KPIs	Sales Role A Performance	Weighted Score SUM 6 KPIs	Percentile
97	19.0	86th percentile	21	1.00
96	18.8		20	0.90
95	18.5		20	0.90
94	18.3		19	0.86
93	18.0	57th percentile	18	0.57
92	17.8		18	0.57
91	17.5		18	0.57
90	17.3		18	0.57
89	17.0	52nd percentile	18	0.57
88	16.8		18	0.57
87	16.5		17	0.52
86	16.2		16	0.33
85	16.0	33rd percentile	16	0.33
84	15.7		16	0.33
83	15.5		16	0.33
82	15.2		15	0.24
81	15.0	24th percentile	15	0.24
80	14.7		14	0.10
79	14.5		14	0.10
78	14.2		14	0.10
77	14.0	10th percentile	12	0.05
76	13.7		8	-
75	13.5			
74	13.2			
73	12.9			
72	12.7			
71	12.4			
70	12.2			
69	11.9	5th percentile		

Figure 2A: Categorization of Sales Role A candidates according to performance quartiles

KPI1	KPI2	KPI3	KPI4	KPI5	KPI6	Weighted Score	Quartile for Weighted Score
FY'16 - 3MFY'18	FY'16-FY'17						
3	4	4	4	4	3	22	Top 25 percentile
1	2	2	1	3	2	11	Bottom 25 percentile
1	2	2	3	3	2	13	Bottom 25 percentile
2	4	3	2	1	2	14	25-50 percentile
2	3	2	2	2	3	14	25-50 percentile
2	4	1	3	1	1	12	Bottom 25 percentile
3	3	4	2	2	4	18	Top 25 percentile
1	2	1	4	1	1	10	Bottom 25 percentile
4	1	1	1	3	1	11	Bottom 25 percentile
2	1	1	2	2	4	12	Bottom 25 percentile
3	2	4	2	4	4	19	Top 25 percentile
3	1	4	3	3	3	17	50-75 percentile
2	2	1	2	1	3	11	Bottom 25 percentile
4	4	2	1	1	1	13	Bottom 25 percentile
3	1	2	3	2	2	13	Bottom 25 percentile
3	4	3	1	1	2	14	25-50 percentile
2	4	4	2	4	2	18	Top 25 percentile

Figure 4: KPI scores used to calculate general performance rating

References

- Krumboltz, J. D., & Vidalakis, N. K. (2000). Expanding learning opportunities using career assessments. *Journal of Career Assessment*, 8(4), 315 – 327. doi: 10.1177/106907270000800401