



# The Extraordinary Leader 360-degree Survey

A detailed look at the data and statistical significance behind Zenger Folkman's 360-degree Survey

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## **Predictive Validity**

Thirty-two 360-degree data sets were analyzed, containing results from over a hundred different companies. Table 1 lists the different data sets used in the analysis.

As is shown in the table, the analysis was completed using results from 237,123 survey responses on 26,314 leaders. Each of the different data sets represents different customized 360-degree surveys. A total of 1,956 items were used. Very few

of the items were repeated in the different surveys. This provides an extraordinarily rich data set of competencies and items from a variety of different organizations.

Each data set was analyzed extensively. First, data sets were compiled into an aggregated format by computing an overall average of all responses (manager, peers, direct reports, and others), with the self-response excluded. This was done for each leader in the data set. Next, an overall score

was computed by averaging all items into an overall index. We then determined from the overall score the top 10 percent of highest-scoring leaders and the bottom 10 percent of lowest-scoring leaders. Using these two groups, independent t-tests were performed on each item. The t-values from the t-test were then sorted for all survey items. The 10–15 items with the largest differences were selected from each data analysis and put into a combined set of key differentiating items. All items selected were highly significant. Once all the analyses were completed, the combined list was again sorted, selecting only those with the highest t-values.

Each item was put on a 3x5 card and sorted separately. After several iterations, the items were grouped into 16 different clusters. Because the survey items crossed over 32 different data sets, we were not able to perform a factor analysis on the overall results; however, we did perform a factor analysis on individual data sets, which helped in creating the appropriate clusters.

The analysis found in Table 1 helped us in creating a new set of items that most effectively

differentiate between the best and worst leaders. This research serves as the basis for creating a highly actionable assessment tool. In 2017 we replicated this study with new customized 360-degree datasets. In this case, they looked at data from 121,128 leaders based on 44 unique assessments and 2,651 behaviors. In total, 1,596,938 multi-rater, or 360-degree feedback assessments, were analyzed, comparing the best leaders to the worst on each survey item. Here is what they found.

1. The original 16 competencies differentiated as well today as they did a decade ago. Those behaviors seemed fundamental to leadership effectiveness and were not likely to change over time.
2. Two of the original competencies had evolved slightly and required an additional survey item and name change.
  - **Practices Self-Development** was always ranked number 16 in terms of importance. Despite its low ratings on importance, our research over the years revealed it was an

important competency. In the last decade, the term “Learning Agility” has come into vogue. Because of new technology, market disruptions, and the overall fast pace of change, leaders today need to not only practice self-development, they need to do it with more speed, agility, and flexibility. In response to that, we changed the name of this competency to Learning

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Agility and added an additional item.

- **Dealing with the Outside World.** This competency measured a leader’s ability to look beyond what was happening internally in an organization to what competitors were doing and what customers needed. In the last decade, the focus on customers and the perceived importance of customers have changed significantly. In response to that trend, we added an additional item to this competency focused on customers. We renamed the competency “Customer and External Focus.”
3. In our latest research, we identified three additional differentiating competencies that had gained ground in importance and relevance for leaders today.
- **Makes Decisions.** We have never had as much data to help leaders make decisions as we have today, but rather than make decisions quicker, the additional data has made many leaders indecisive. This information overload complicates

decision-making, yet rapid and sound decisions are more important today than they have ever been.

- **Takes Risks.** Disruption in almost every industry has had a significant impact on most organizations. Fewer than 12% of the Fortune 500 companies included in 1955 were still on that list 62 years later. Organizations that refuse to change may very well die as more agile competitors take the risks necessary to compete.
- **Values Diversity.** It’s not hard to notice the increased emphasis in organizations and society on inclusion and diversity. It’s a critical skill that leaders value others who are different in how they look, act, and think.

Our new model includes 19 competencies. These changes have refreshed the assessment and added new items and competencies that provide additional insights to all participants. The Pulse Check, another new feature we have added to the assessment, gives each participant the ability to do a six-month check-up on their progress. Rather than re-

administer all the survey items, the pulse survey allows each participant to select six items to send to their raters and measure their progress. We have found this an easy and effective way to gauge the impact of early actions on change.

### **Prediction of Employee Engagement and Commitment**

In our original research, we found that leadership effectiveness highly correlates with employee engagement and commitment. We have consistently found that leadership effectiveness highly correlates to employee engagement/commitment across a variety of assessments from different organizations. To test the effectiveness of *The Extraordinary Leader* survey, we looked at results for 1,516 managers who had completed *The Extraordinary Leader* 360-degree Assessment. The managers were from various organizations, but all had at least three direct reports. The direct reports assessed each manager’s leadership effectiveness and indicated their personal level of engagement and commitment to the organization. We then created an overall leadership effectiveness index composed of all items in the

survey and broke the overall score into 10 deciles. The employee engagement and commitment index was calculated as a percentile score compared to the other managers in the study. The results of the study are contained in Figure 1.

As is very evident from Figure 1, *The Extraordinary Leader* 360-degree Assessment shows a strong correlation between leadership effectiveness and Employee Engagement/Commitment. The Pearson Correlation between these two indices produces a correlation of 0.561, which is significant at the 0.000 level (see Table 2).

### Prediction of Intention to Leave

Our original research found leadership effectiveness highly

correlates with the retention of employees. To validate the effectiveness of *The Extraordinary Leader* Assessment, we asked direct reports of 1,516 leaders the following question: “I rarely think about quitting my job to go to a different company.” Figure 2 shows the percentage of direct reports in each work group who responded negatively or neutrally to the above item.

The Pearson Correlation between these two indices produces a correlation of 0.459, which is significant at the 0.000 level. The leadership effectiveness index was calculated using the same approach as mentioned above.

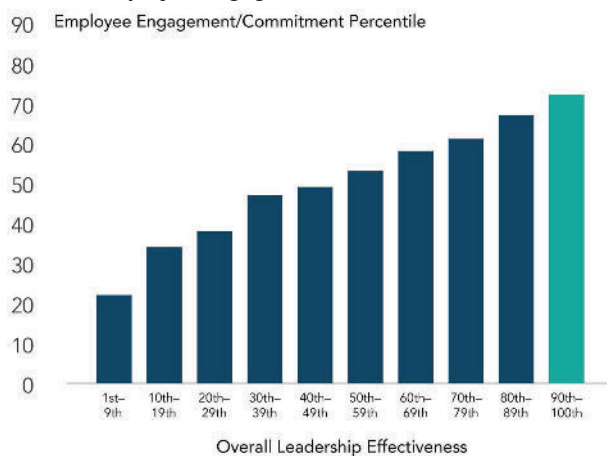
### Prediction of Highly Committed Employees

A highly committed employee is a valuable asset in any

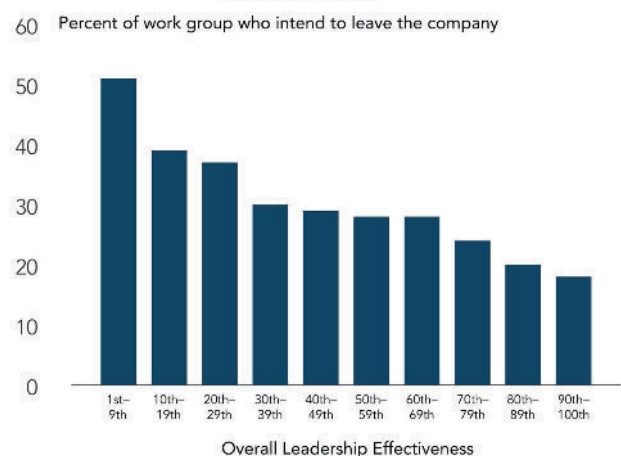
organization. We hypothesized that the effectiveness of a leader increased the percentage of highly committed employees. To test this hypothesis, we asked direct reports the following item: “My work environment is a place where people want to go the extra mile.” We looked at the percentage of each work group who responded, “Strongly Agree.” It was interesting to find that even the worst leaders (those at the 1st–9th percentile) had 13 percent of their work group in the highly committed category. It is, however, impressive the impact leadership possesses on this variable. Leaders at the higher percentiles had over 40 percent of their work group members as highly committed.

Figure 3 shows the percentage of direct reports in each work

**Fig. 1 – Impact of Leadership Effectiveness on Employee Engagement**



**Fig. 2 – Impact of Leadership Effectiveness on Employees’ Intent to Leave**



group who responded “Strongly Agree” to the item. The Pearson Correlation between these two indices produces a correlation of 0.564, which is significant at the 0.000 level. The leadership effectiveness index was calculated using the same approach mentioned above.

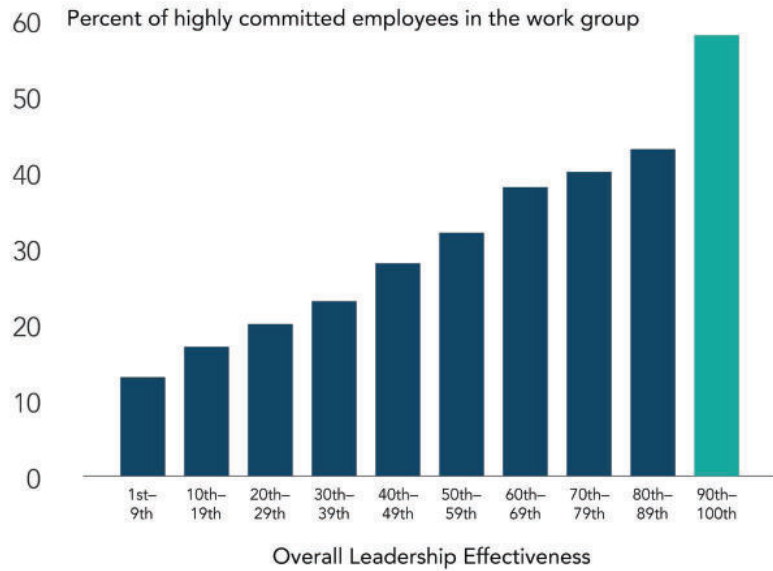
**Correlation of 19 Differentiating Competencies to Employee Commitment Index**

To verify the ability of each differentiating competency to predict employee commitment results from the aggregate employee commitment index for direct reports, we correlated them to each of the 19 differentiating competencies. All correlations were highly significant.

**Differences Between Top Management and Next-Level Management Leaders**

Organizations take great care to promote their best leaders into top management positions. Most people would agree the top management of a company ought to exhibit better leadership than the next level of management. In this study, using *The Extraordinary Leader* 360-degree Assessment, we looked at the 28 top managers of a high technology

**Fig. 3 – Impact of Leadership Effectiveness on Employee Commitment**



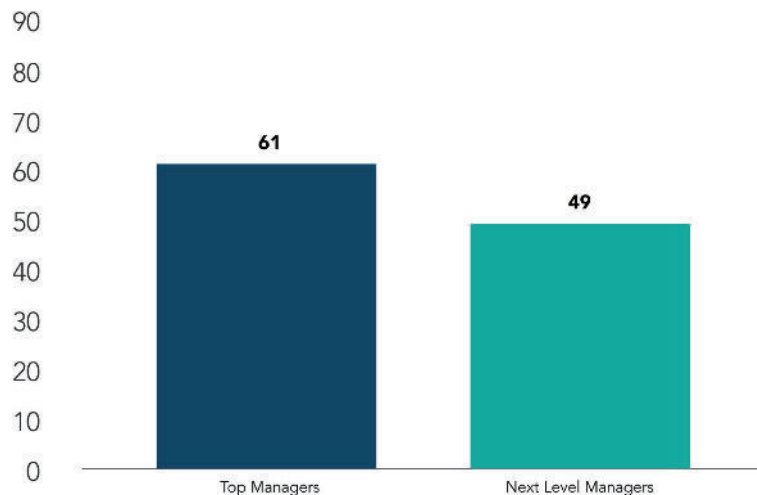
company and compared them to 205 leaders at the next two levels of the organization. The study shows a significant difference between the two groups. A t-test yielded a t-value of 1.97, with a 0.05 level of significance.

Figure 4 shows that senior leaders scored at the 61st percentile overall, while other leaders scored at the 49th percentile.

**Differences Based on High Potential Ratings**

Many organizations rate their

**Fig. 4 – Average Leadership Effectiveness by Management Position**



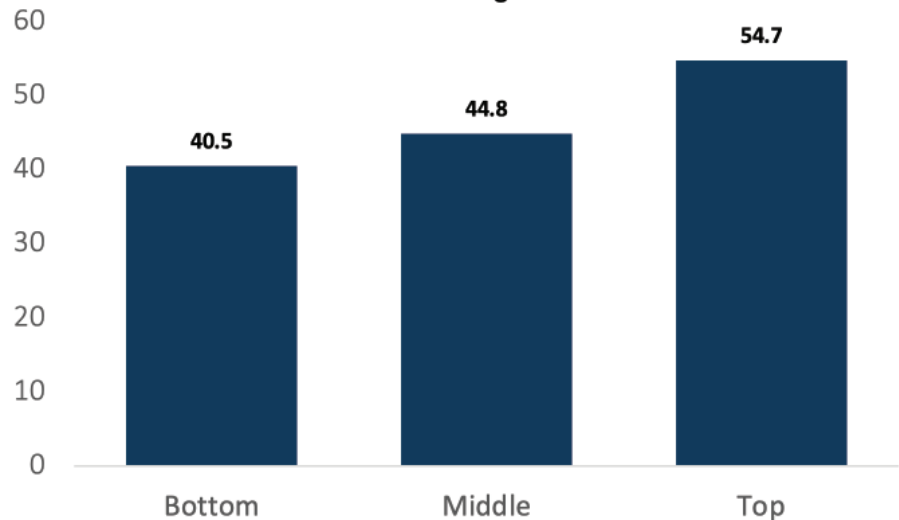
potential leaders for promotion. In a large manufacturing organization, we collected the potential ratings of 4,922 leaders. The rates put leaders into three groups, “Top,” “Middle,” and “Bottom.”

Each leader also participated in the *Extraordinary Leader* 360-degree assessment with evaluations from their manager, peers, direct reports, and others. On average, each leader in this study was evaluated by 13 raters. The three groups were compared using the overall leadership effectiveness rating. Figure 5 shows the results of the study with leaders rated as having “Top” potential at the 54.7th percentile, “Middle” potential at the 44.8th percentile, and “Bottom” potential at the 40.5th percentile. T-tests comparing the “Top” to “Middle” had a t-value of 13.278, Sig. 0.000, “Bottom” to “Top” had a t-value of 5.987, Sig. 0.000 and “Bottom” to “Middle” had a t-value of 1.815, Sig. 0.070. This study clearly demonstrates that the *Extraordinary Leader* 360-degree assessment is an effective tool for predicting those leaders with the highest potential.

### Concurrent Validity

Concurrent validity tests the

**Fig. 5 Average Leadership Effectiveness by Potential Ratings**



relationship between item scores and another validated measure that essentially measures the same thing. To perform this, test data was collected on 938 managers in a large manufacturing company. A subset of items from the differentiating competencies was used to assess the ability of the combined competencies to evaluate a manager’s overall effectiveness. The concurrent measure was a survey item that assessed the overall effectiveness of a manager. An overall index was created, composed of a summary of all 360-degree assessment items. This index was correlated with the Mayflower survey item assessing the overall effectiveness of a manager. The Pearson Correlation

between the two variables was 0.778, which is significant at the 0.000 level.

This particular study provides strong evidence that the differentiating competencies provide an excellent assessment of the overall effectiveness of a manager.

### Reliability

An excellent measure of the effectiveness of a survey is the alpha coefficient. This measure of internal consistency indicates if the items in each category work effectively together to measure a competency. The target Alpha is 0.80 for an effective scale. Table 3 lists alpha coefficients for each of the 19 differentiating competencies and the employee commitment index.

As is evident from the alpha coefficients, each of the survey categories is a well-constructed scale. All categories, except Championing Change and the Employee Commitment Index, have three items.

### Conclusions

*The Extraordinary Leader* 360-degree Assessment is a

highly valid and reliable survey. Our experience in creating a variety of 360-degree assessment surveys over the past 25 years has taught us valuable lessons about what works and what does not. In the process of creating these surveys, our learning curve has helped us to identify items that are most effective in differentiating leaders. Items

which differentiate are also more likely to be improved. Our learning has taught us much about which items and survey categories would have the best psychometric qualities, but it has also taught us which items lead people to change. In the end, this practice is about helping people become extraordinary leaders.

**Table 1: Composition of 32 Data Sets Used in the Key Differentiator Analysis**

Data Set	Assessments Completed	Leaders Assessed	Survey Items	Organization Description
1	2,872	290	64	R&D
2	10,691	762	36	Bank/Investment
3	4,178	639	45	Generic Survey
4	1,346	29	66	Chemicals
5	3,782	486	18	Food Processing
6	6,365	687	54	Food Sales
7	9,395	925	47	Foods
8	137	17	86	Manufacturing
9	2,670	349	48	Foods
10	21,786	3,022	60	High Technology
11	2,573	357	61	High Technology
12	1,502	147	52	Information Processing
13	3,512	259	84	Publishing
14	19,671	2,030	61	Generic Survey
15	7,290	943	60	Oil—Up Stream
16	1,221	180	53	Hi-Tech Manufacturing
17	2,648	276	91	Hi-Tech Development
18	2,177	262	71	Hi-Tech
19	11,048	1,123	88	Hi-Tech Development
20	12,060	1,175	79	Hi-Tech Sales/Service
21	1,183	165	51	Automotive
22	9,323	901	50	Foods
23	1,831	210	99	Foods
24	2,001	194	50	Restaurant
25	7,155	1,009	66	R&D
26	14,630	2,125	70	Generic Survey
27	62,919	6,716	73	Generic Survey
28	2,300	146	52	Forest Products
29	2,174	196	60	Paper
30	4,083	338	54	Banking
31	1,297	130	55	Mortgage Bank
32	1,303	126	50	Insurance
<b>Total</b>	<b>237,123</b>	<b>26,314</b>	<b>1,956</b>	

**Table 2: Pearson Correlations between Employee Commitment and the 19 Differentiating Competencies**

	<b>Pearson Correlation</b>	<b>Sig. (2-tailed)</b>	<b>N</b>
Collaboration and Teamwork	0.51	0.00	5697
Inspires and Motivates Others to High Performance	0.51	0.00	5699
Establishes Stretch Goals	0.50	0.00	5698
Learning Agility	0.50	0.00	5701
Communicates Powerfully and Prolifically	0.50	0.00	5701
Builds Relationships	0.49	0.00	5701
Develops Strategic Perspective	0.49	0.00	5700
Champions Change	0.48	0.00	5693
Customer and External Focus	0.47	0.00	5693
Takes Risks	0.47	0.00	5685
Displays High Integrity and Honesty	0.47	0.00	5701
Makes Decisions	0.47	0.00	5701
Develops Others	0.47	0.00	5701
Takes Initiative	0.47	0.00	5700
Solves Problems and Analyzes Issues	0.47	0.00	5701
Values Diversity	0.47	0.00	5697
Innovates	0.45	0.00	5698
Drives for Results	0.45	0.00	5699
Technical or Professional Expertise	0.43	0.00	5699



**Table 3: Cronbach's Alpha Coefficients for the 19 Differentiating Competencies**

	<b>Cronbach's Alpha</b>
Displays High Integrity and Honesty	0.94
Technical or Professional Expertise	0.96
Solves Problems and Analyzes Issues	0.90
Innovates	0.94
Learning Agility	0.93
Drives for Results	0.94
Establishes Stretch Goals	0.94
Takes Initiative	0.90
Makes Decisions	0.95
Takes Risks	0.95
Communicates Powerfully and Prolifically	0.94
Inspires and Motivates Others to High Performance	0.96
Builds Relationships	0.93
Develops Others	0.94
Collaboration and Teamwork	0.94
Values Diversity	0.95
Develops Strategic Perspective	0.94
Champions Change	0.93
Customer and External Focus	0.93
Employee Commitment Index	0.91

## About Us

Zenger Folkman relentlessly seeks to rise above the inconsistent and sometimes misleading, nature of popular leadership philosophies and beliefs brought on by opinion. The discipline of leadership and those who pursue it deserve better. Our most valuable asset is the expertise of combining hard data and statistical analysis with logical explanations and actionable applications that help individual leaders thrive and organizations succeed.

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