



# The Science, Design and Validation Behind Leader Assessment

**The subject of leadership is dense and multi-faceted. The challenge for the Compass team was to determine what to measure, what to coach, and what to emphasize.**

**What differentiates an effective leader from an ineffective one?**

**What is the single most important thing worthy of a leader's focus? The second most important? The third? And just how long is the list?**

**Are leaders born or made? Is leadership embedded in personality traits that cannot be taught, or is leadership embedded in behaviors that can?**

If your answers to these questions included the words “it depends,” you are not only correct, but you have accurately identified a reality about the subject of leadership. It is complex, dense and multi-faceted, which means there are no easy answers.

While the difficulty of identifying effective leadership characteristics and behaviors that hold true across all contexts and situations is significant, it hasn't stopped thousands of brilliant social scientists from trying over the centuries. The results of these efforts have created a wide range of theories, most of which have been scientifically validated by research, experimentation and statistical analysis. The problems arise when these theories seem to contradict each other.

For example, some theories stress the importance of communicating authentically, while others stress the importance of communicating sensitively. Some theories stress the importance of treating everyone the same (in the interests of fairness), while others stress the importance of treating everyone differently (based on a wide range of factors, like experience or personal preference). Some theories stress the importance of empathy, while others stress the importance of charisma.

This complex landscape creates a major challenge for leadership development practitioners when considering what to measure, what to coach, and what to emphasize.

To help address these challenges, the Compass team began with a literature review of widely accepted and/or statistically validated leadership theories. The goal was to identify common constructs across them that a) focused on the leader-subordinate dynamic, b) could be coached and improved, and c) were applicable to the broadest range of business environments.

**Specifically, these theories included:**

- Path-Goal Theory (House)
- Situational Leadership Theory (Blanchard)
- Leader-Member Exchange Theory (Basu and Greene)
- Emotional Intelligence (Goleman)
- Transformational Leadership (Bass, Burns)
- Mood Contagion (Bono and Ilies)
- Power, Optimism and Risk-Taking (Anderson and Galinsky)
- Super Leadership (Manz and Sims)
- Servant Leadership (Greenleaf)
- Level 5 Leadership (Collins)
- Authentic Leadership (George)
- Self Determination Theory (Deci and Ryan)
- Goal Setting Theory (Locke)
- Management By Objectives (Drucker)
- Job Characteristics Theory (Hackman and Oldham)
- 2-Factor Theory (Herzberg)
- Expectancy Theory (Vroom)
- Porter and Lawler Model of Motivation
- Range of Affect Theory (Locke)
- Equity Theory (Adams)
- Criteria for Procedural Justice (Leventhal)
- The Five Dysfunctions of Teams (Lencioni)
- Group Value Model (Lind and Tyler)
- Flexible Leadership (Yukl)

**This analysis led to the creation of 48 distinct measurements, which were then organized into 12 distinct categories:**

- |                   |                 |                         |                 |
|-------------------|-----------------|-------------------------|-----------------|
| 1. Communication  | 4. Focus        | 7. Performance          | 10. Motivation  |
| 2. Inclusivity    | 5. Relationship | 8. Adaptability         | 11. Development |
| 3. Self-Awareness | 6. Empowerment  | 9. Difficult Situations | 12. Culture     |

The Compass Leadership Assessment tool then went through several steps of validation, beginning with content validation. Multiple subject matter experts within ADP reviewed it to evaluate the meta categories, and the links between individual metrics and established theories. After internal review, Dr. Annette Flippen, the leadership and motivation expert from NYU’s prestigious I/O Psychology graduate program led a second round of content validation. These reviews included tweaks and revisions, leading to the quantitative stage of criterion validation.

In a pilot test more than 350 respondents evaluated their current manager across all 48 distinct measurements. They also answered one additional question: “How likely are you to recommend this person as a great manager?” This answer served as the Net Promoter Score (NPS) against which the other items were measured.



**256**  
Respondents



**48**  
Questions



**76%**  
of variability in NPS

The results were incredible. All 48 items had a statistically significant relationship with the NPS score, and together explained an incredible 76% of the variability of the NPS. As indicators of reliability, Cronbach’s alpha equaled .98. (.8 is considered reliable, .9 is considered excellent.) No items had excessive missing data, and all items are significantly correlated without any concerns about excessive overlapping (i.e., multicollinearity with inter-item correlations of .85 or higher).

As exciting as these results were, we still faced a design challenge. A survey of 48 items is long, and likely to lead to “survey fatigue.” Survey fatigue is the result of soliciting too much feedback from the employee base, which can lead to diminished response rates, diminished completion rates, and corrupted data. There are many contributing factors to survey fatigue (worthy of their own paper), ranging from the obvious to the subtle. Obvious contributing factors include number and length of surveys, while nuanced factors include a lack of context for why the survey is being administered, repeated items from past surveys, or a lack of belief that the data will be used in any practical way.

A product that creates survey fatigue will fail in the long-term. Therefore, Compass has structured its survey administration to keep results fresh, users engaged, and data uncorrupted. Instead of running all 48 items with each administration, Compass runs only one item within each category, resulting in a survey of twelve measures.

These measures will be repeated over 2-3 administrations of the assessment in order to capture trends and movement. Subsequently, an alternative set of items will replace the previously measured items. This will allow the Compass Leadership Assessment to be relevant over multiple years without creating survey fatigue as well as extend the scope of the leadership behaviors it coaches. This approach will help organizations to create persistent feedback cultures without running into the inevitable problems that would undermine the entire initiative.

By taking a holistic approach to leadership theory, by taking a scientific approach to validation, and by taking an innovative approach to survey administration, Compass has introduced the next generation of leadership development, which can foster noticeably improved returns for leaders, their teams, and their organizations.

### **The first round of 12 items:**

1. I feel understood when I speak with my manager. (Communication)
2. I have a clear understanding of what my manager expects from each of my projects. (Focus)
3. I receive effective coaching from my manager when I need it. (Performance)
4. I can count on my manager to have my back. (Motivation)
5. I feel my manager considers my opinions. (Inclusivity)
6. I experience consistency in my relationship with my manager. (Relationship)
7. I feel my manager provides clear plans for adapting to changes when they occur. (Adaptability)
8. I feel my manager encourages my development in my current role. (Development)
9. I feel my manager brings positive energy to work. (Self-Awareness)
10. I am recognized for my contributions by my manager. (Empowerment)
11. I feel my manager takes responsibility for the failures of the team when they occur. (Difficult Situations)
12. I feel my manager helps strengthen my relationships with other team members. (Culture)