

Research Report for Spectra Diversity

Report Created: May 2016

The ***Spectra Diversity and Inclusion Profile™*** was developed using rigorous research standards. This document summarizes the steps taken to develop the profile.

I. Item Development

A. Conceptual Framework

A conceptual framework (Figure 1) prevalent in the diversity and inclusion literature was adopted to guide the development of items for this profile. Each organization has a set of organizational values that drive the content of practices, programs, policies and procedures in the organization. Those practices, policies and procedures shape expected workplace behaviors for employees. At the same time, each employee working in an organization has their own set of personal values that drive their attitudes and beliefs about the world which, in turn, determine the behaviors people exhibit when they interact in a work setting. The purpose of this profile is to focus on the behaviors that overlap between the organization and individual. This overlap is where behaviors can be seen and observed every day. The intent of the profile is not to change the values of the organization or the individual. Rather, it is meant to foster a deep exploration into behaviors that can often impact both the organization's programs, practices and policies and the individual's attitudes and beliefs.

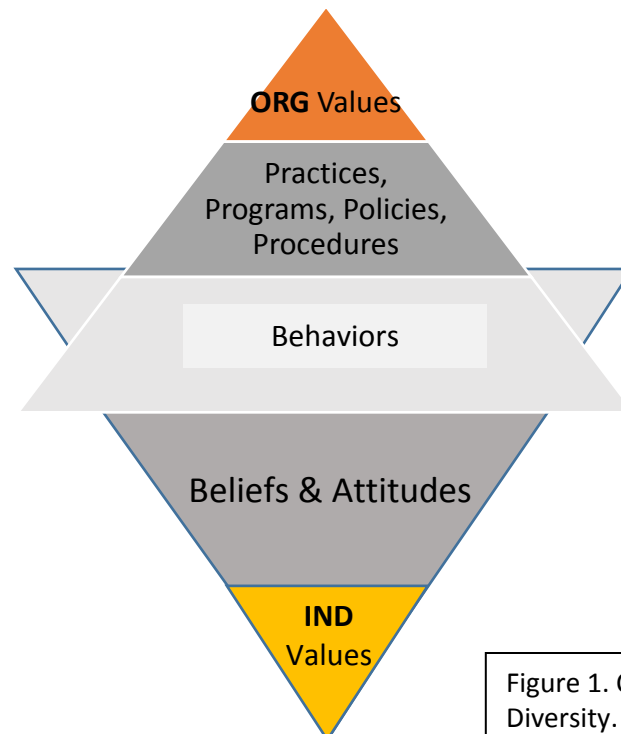


Figure 1. Celebrating Organizational Diversity. Myers and Tolbert

B. Development of the Item Pool

To develop the items for the profile, three diversity and inclusion experts reviewed the pertinent literature to identify concepts that should be reflected in the items. Weight was given to the most recent publications. Once the concepts were identified, the three experts generated items reflective of the literature review. Further, items from custom assessments developed in the past by the experts were added to the pool of items. The initial pool included 120 items. These items were reviewed by seven additional diversity and inclusion experts who narrowed down the list to 48 items to be used in a pilot study.

C. Face and Content Validity Assessment

A second group of diversity and inclusion experts reviewed the items and provided feedback. Finally, during the pilot, feedback on the items was solicited from participants. The feedback was reviewed and items updated or excluded. The types of feedback received included suggestions to clarify items, suggestions to remove redundant items, expressed personal discomfort with some of the items, among others. Reviewed feedback (from 700 pilot participants).

II. Scale Development/Instrument Design

Likert scaling, used often in attitude instruments, was chosen for response measurement. The following kinds of scale anchors were used: 1) an agreement scale that included Strongly Agree, Agree, Disagree, Strongly Disagree, or 2) a frequency scale that included Almost Always, Sometimes, Rarely, Almost Never. Several of the 48 items in the pilot study were reverse-scaled to reduce response set bias. The questions were arranged such that the items utilizing the agreement scale were grouped together and the items using the frequency scale were grouped together. The sequence of the items in each group were assigned randomly.

III. Analysis

A. Pilot Procedure

Data were collected via an electronic survey via Survey Monkey. The respondents came from a convenience sample where the authors solicited organizations in which they had contacts to participate. Further, the authors posted a link to the survey via their LinkedIn and Facebook accounts. The survey remained open for 3 weeks during which time 750 people accessed the survey.

B. Demographic Analysis

Respondents from the pilot included 750 people from across at least 11 organizations, nine of which are corporations and two of which are educational institutions. Further,

respondents were recruited through links to the instrument via the authors' LinkedIn and Facebook posts. Table 1 contains demographic information on this pilot group.

Table 1: Demographics – Pilot Group (N=700)

<p>Gender: Female 60.5% Male 39.2% Other .3%</p>	<p>Sexual Orientation: Heterosexual 94.4% LGBTQ 5.6%</p>
<p>Age: 18 to 24 1.3% 25 to 34 14.2% 35 to 44 18.6% 45 to 54 30% 55 to 64 26.5% 65 to 74 8.9% 75 or older .5%</p>	<p>Education Level: High school graduate 2.74% Some college 8.4% Graduate of a college or university 29% Masters 33.8% Doctorate 19.8% Post Doctorate 6.6%</p>
<p>Race/Ethnicity: American Indian or Alaska Native 2.7% Hawaiian or Other Pacific Islander 1.7% Asian or Asian American 5.2% Black or African American 12.7% Hispanic or Latino 6.5% Non-Hispanic White 74.8% Other (please specify) 9.1%</p>	<p>Geographic Region: West 12.7% Midwest 15% South 6.1% Northeast 66.2%</p>

C. Reliability Analysis

The reliability was measured using an internal consistency formula. Calculations were performed for each of the five categories separately. For each category, questions within a category that reduced the reliability were removed. The results of the analysis are shown in Table 2.

Cronbach's Alpha was measured and ranged from .7 to .9. Typically, greater than .8 is good with greater than .7 being acceptable. Less than .5 is often regarded as unacceptable. A good Cronbach's Alpha measure doesn't necessarily indicate unidimensionality. Finally, while several items in the pilot pool of items were reverse scored, only two reverse-scored questions made the cut when optimizing the reliability of each scale.

Table 2: Cronbach's alpha reliability for five scales – Pilot Group (N=750)

Management	.90
Culture	.84

3P (Programs, Processes, Procedures)	.84
Belief	.70
Skills	.83

D. Normative Distribution and Scoring

It was established that the pilot data fit the normal distribution curve. The mean and standard deviation for each scale is reported in Table 3.

For the purposes of providing tailored feedback, the scales associated with organization-related items were segmented according to the normal distribution. The following cuts were used to create three range levels: Level 1 was below -1 standard deviation, Level 2 was between -1 and +1 standard deviations, and Level 3 was above 1 standard deviation. As a result, (according to the properties of the normal cone), 16 percent of people will fall into Level 1 (0 to 16th percentile), 68 percent of people will fall into Level 2 (16 to 84th percentiles), and 16 percent of people will fall into Level 3 (84 to 100th percentiles).

The scales associated with individual-related items were segmented according the following cuts to create three range levels: Level 1 was below the 25th percentile, Level 2 was between the 25th and 75th percentile, and Level 3 was above the 75th percentile.

Table 3: Score distribution by scale

	Mean	Std. Dev.	-1 Std.	+1 Std.
Management	17.2	4.6	12.6	21.8
Culture	18.6	3.8	14.8	22.4
3P	17.1	4.3	12.8	21.4
Belief	29.7	6.6	23.1	36.3
Skills	29.6	7.3	22.3	36.9

E. Generalizability

This survey was developed and normed for U.S. respondents only. Before using it in other countries the content of each scale should be reviewed to determine its relevance and breadth of coverage in relation to local diversity issues and opportunities.

For additional information please visit:

www.SpectraDiversity.com

or call toll free: 855-344-8688