



TTI Performance Systems on Adverse Impact

What is Adverse Impact and/or Disparate Impact?

Under the Disparate Impact rule, an employer may not use an employment practice (e.g., a pre-employment aptitude test) that, even though neutral on its face and applied to all applicants or employees disproportionately excludes members of a protected category. **An employer can defend its reliance on such an employment practice only if the employer proves that the challenged practice is job related for the position in question and consistent with business necessity.**

Applicants for employment, promotion, or other employment benefits who challenge the denial of the benefit to them will have to prove that the specific employment practice at issue has a disparate impact, unless the applicant proves that the elements of the employer's decision-making process are not capable of separation for analysis, in which case the entire decision-making process may be analyzed as one employment practice.

The Equal Employment Opportunity Commission (EEOC) has long advocated the “80 percent” rule to assess when a particular employment practice has an unlawful disparate impact. Some standard is necessary because all employment criteria will exclude some applicants or employees.

Essentially, the EEOC has determined that if the selection rate of a particular employment practice for a protected category is less than 80 percent of the selection rate for the relevant comparison group, that employment practice has a disparate impact. While the administrative 80 percent rule has not been incorporated into statute, the EEOC and the courts look to the rule as a guide in determining disparate impact challenges.



What is a Pre-Employment Aptitude Test?

An aptitude test by definition is any number of various tests given to measure abilities, such as manual dexterity, visual acuity, reasoning, or verbal comprehension, and used to assist in the selection of a career. By definition it is also assumed that a pass/fail rating is determined for such tests.

How are Assessments from TTI Performance Systems Different?

Overall TTI assessments are not pass/fail assessments. **While on the surface some of the assessments appear to have ten as the best “score” this is not the case.** Each factor of measurement can be a strength on either end of the scale (a zero all the way to a ten). This is because of our job-related process. TTI does not recommend using assessments in hiring unless you have completed our job benchmarking process.

The job benchmarking process is designed to provide clarity as to the position requirements, key accountabilities, skills,

behaviors and motivators for each position within an organization. While TTI has over 7000 job benchmarks available, it is recommended to complete the process within each organization for each position.

Because the TTI assessments are not pass/fail, the “80 percent” rule has to be applied differently. In order to illustrate TTI’s compliance with this standard, we look at the mean of the measured factors for the general population as well as male/female, veteran status, disability status and ethnicity. The following charts will demonstrate that the TTI assessments do not have more than a 20 percent difference in how protected groups score versus the general population.

Adverse Impact Study Completed in 2010

Conclusion—There is no evidence to suggest any of the TTI assessments (DISC, Values, HVP) could cause adverse impact with regard to gender, race, disability or veteran status.

Even though the means of the subgroups are statistically different from the means of the general population, they are all well within the EEOC guideline of 80 percent and well within the first standard deviation from the population mean.



Behavioral/DISC Findings as of September 2010

Random Sample N=35389

Measurement	Mean	Standard Deviation
Dominance	51.74	24.33
Influence	57.58	25.75
Steadiness	47.87	27.62
Compliance	52.81	23.75

Males N= 21814

Measurement	Mean	Standard Deviation	% Difference from Random Sample
Dominance	55.56	23.53	3.82%
Influence	54.71	25.7	2.87%
Steadiness	43.72	27.02	4.15%
Compliance	53.47	23.18	0.65%

Females N=13575

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	45.60	24.33	6.14%	9.96%
Influence	62.18	25.17	4.61%	7.48%
Steadiness	54.53	27.27	6.66%	10.81%
Compliance	51.76	24.61	1.05%	1.71%



Behavioral/DISC Findings as of September 2010

Caucasians N=14355

Measurement	Mean	Standard Deviation	% Difference from Random Sample
Dominance	52.32	25.39	0.58%
Influence	58.79	26.5	1.22%
Steadiness	48.35	28.69	0.48%
Compliance	51.63	24.2	1.18%

African Americans N=2005

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	48.51	22.36	3.23%	3.81%
Influence	51.04	23.57	6.53%	7.75%
Steadiness	52.07	26.45	4.20%	3.72%
Compliance	57.65	20.44	4.84%	6.02%

Hispanic N=1047

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	50.19	22.76	1.55%	2.13%
Influence	56.30	25.57	1.27%	2.49%
Steadiness	47.91	27.15	0.04%	0.44%
Compliance	55.30	22.92	2.49%	3.67%



Behavioral/DISC Findings as of September 2010

Asian N=705

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	47.89	23.89	3.85%	4.43%
Influence	50.28	25.22	7.29%	8.51%
Steadiness	50.78	27.56	2.91%	2.43%
Compliance	59.77	22.9	6.95%	8.13%

Hawaiian/Pacific Islander N=75

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	47.43	20.69	4.31%	4.90%
Influence	55.48	28	2.10%	3.31%
Steadiness	52.64	27.61	4.77%	4.29%
Compliance	55.67	23.84	2.85%	4.03%

Disabled N=255

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	49.60	25.51	2.14%	4.21%
Influence	50.59	25.53	6.69%	9.77%
Steadiness	52.05	28.46	4.18%	3.99%
Compliance	57.99	24.53	5.18%	7.03%



Behavioral/DISC Findings as of September 2010

Disabled Veteran N=125

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	57.11	24.21	5.37%	5.97%
Influence	52.18	26.12	5.40%	5.73%
Steadiness	42.66	27.02	5.22%	6.52%
Compliance	54.69	21.22	1.87%	1.92%

Vietnam Veteran N=402

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	55.53	25.22	3.79%	4.39%
Influence	50.77	26.08	6.80%	7.13%
Steadiness	45.34	29.26	2.53%	3.84%
Compliance	55.68	22.72	2.86%	2.91%

Other Veteran N=1414

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Dominance	55.45	24.03	3.71%	4.31%
Influence	53.11	25.78	4.46%	4.79%
Steadiness	44.80	27.85	3.07%	4.38%
Compliance	54.44	22.89	1.63%	1.68%



Motivators/PIAV Findings as of September 2010

Random Sample N=35388

Measurement	Mean	Standard Deviation
Theoretical	57.50	14.47
Utilitarian	60.95	16.08
Aesthetic	30.71	16.53
Individualistic	52.71	13.54
Social	59.01	14.75
Traditional	39.12	17.01

Males N=21813

Measurement	Mean	Standard Deviation	% Difference from Random Sample
Theoretical	59.16	14.49	1.66%
Utilitarian	62.93	15.85	1.99%
Aesthetic	28.06	15.6	2.65%
Individualistic	55.64	12.88	3.02%
Social	56.04	14.41	2.97%
Traditional	37.17	17.16	0.99%

Females N=13575

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	54.84	14.04	2.66%	4.32%
Utilitarian	57.75	15.93	3.20%	5.18%
Aesthetic	34.97	17.07	4.26%	7.05%
Individualistic	47.99	13.23	4.86%	7.88%
Social	63.77	14.04	4.77%	7.73%
Traditional	40.67	16.66	1.59%	2.58%



Motivators/PIAV Findings as of September 2010

Caucasians N=14354

Measurement	Mean	Standard Deviation	% Difference from Random Sample
Theoretical	57.84	14.66	0.33%
Utilitarian	60.54	16.12	0.40%
Aesthetic	30.88	16.6	0.17%
Individualistic	53.20	13.8	0.51%
Social	58.95	14.93	0.06%
Traditional	38.59	16.81	0.55%

African Americans N=2005

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	53.71	13.01	3.79%	4.13%
Utilitarian	59.51	15.49	1.44%	1.03%
Aesthetic	26.17	14.61	4.54%	4.70%
Individualistic	49.60	12.18	4.24%	4.74%
Social	64.18	13.65	5.17%	5.23%
Traditional	47.82	16.03	8.97%	9.93%

Hispanic N=1047

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	58.77	14.09	1.27%	0.93%
Utilitarian	59.27	16.21	1.68%	1.28%
Aesthetic	31.59	16.12	0.88%	0.71%
Individualistic	50.30	13.28	2.48%	2.99%
Social	60.03	14.69	1.02%	1.08%
Traditional	40.07	15.92	0.98%	1.59%



Motivators/PIAV Findings as of September 2010

Asian N=705

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	63.66	14.79	6.16%	5.82%
Utilitarian	60.21	16.97	0.74%	0.34%
Aesthetic	30.78	15.76	0.07%	0.10%
Individualistic	47.84	13.18	5.02%	5.53%
Social	59.22	14.19	0.22%	0.27%
Traditional	38.27	15.72	0.89%	0.35%

Hawaiian/Pacific Islander N=75

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	56.08	15.49	1.42%	1.76%
Utilitarian	57.71	18.23	3.24%	2.84%
Aesthetic	31.89	17.31	1.18%	1.01%
Individualistic	49.56	12.42	3.24%	3.75%
Social	61.05	15.13	2.05%	2.11%
Traditional	43.67	15.56	4.68%	5.46%

Disabled N=255

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	57.64	14.62	0.13%	0.11%
Utilitarian	55.13	16.15	5.82%	3.08%
Aesthetic	31.86	17.3	1.15%	1.43%
Individualistic	50.25	15.05	2.53%	3.06%
Social	61.71	16.58	2.70%	2.65%
Traditional	43.37	17.86	4.38%	0.96%



Motivators/PIAV Findings as of September 2010

Disabled Veteran N=125

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	59.13	15.15	1.62%	1.66%
Utilitarian	57.38	17.02	3.56%	3.01%
Aesthetic	26.99	15.63	3.72%	3.81%
Individualistic	57.10	14.1	4.53%	5.66%
Social	58.11	15.2	0.89%	1.83%
Traditional	41.12	16.3	2.06%	1.42%

Vietnam Veteran N=402

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	58.33	15	0.83%	0.86%
Utilitarian	58.04	16.03	2.91%	2.36%
Aesthetic	28.06	14.75	2.65%	2.74%
Individualistic	57.80	12.72	5.25%	6.39%
Social	56.71	13.84	2.30%	3.24%
Traditional	41.03	17.71	1.97%	1.33%

Other Veteran N=1414

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Theoretical	59.66	14.4	2.16%	2.19%
Utilitarian	59.45	15.49	1.49%	0.94%
Aesthetic	27.52	15.51	3.19%	3.28%
Individualistic	57.12	13.86	4.55%	5.68%
Social	56.90	14.69	2.11%	3.05%
Traditional	39.32	17	0.20%	0.48%



Hartman Value Profile/HVP Findings as of September 2010

Random Sample N=33152

Measurement	Mean	Standard Deviation
Empathetic Outlook	7.94	1.36
Practical Thinking	7.66	1.6
Systems Judgment	7.48	1.37
Sense of Self	7.41	1.27
Role Awareness	6.91	1.44
Self Direction	7.09	1.19

Males N=20671

Measurement	Mean	Standard Deviation	% Difference from Random Sample
Empathetic Outlook	7.98	1.3	0.41%
Practical Thinking	7.77	1.48	1.10%
Systems Judgment	7.49	1.34	0.11%
Sense of Self	7.39	1.26	0.16%
Role Awareness	6.92	1.43	0.17%
Self Direction	7.04	1.19	0.56%

Females N=12481

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.87	1.47	0.69%	1.10%
Practical Thinking	7.48	1.77	1.83%	2.93%
Systems Judgment	7.46	1.44	0.18%	0.29%
Sense of Self	7.43	1.27	0.27%	0.43%
Role Awareness	6.88	1.47	0.29%	0.46%
Self Direction	7.18	1.18	0.92%	1.48%



Hartman Value Profile/HVP Findings as of September 2010

Caucasians N=12806

Measurement	Mean	Standard Deviation	% Difference from Random Sample
Empathetic Outlook	8.05	1.26	1.16%
Practical Thinking	7.78	1.47	1.24%
Systems Judgment	7.56	1.3	0.82%
Sense of Self	7.15	1.15	0.58%
Role Awareness	6.99	1.3	0.83%
Self Direction	7.15	1.15	0.58%

African Americans N=1841

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.41	1.75	5.24%	6.40%
Practical Thinking	6.92	2.12	7.41%	8.65%
Systems Judgment	7.00	1.67	4.81%	5.62%
Sense of Self	7.52	1.25	1.13%	0.73%
Role Awareness	7.02	1.37	1.13%	0.30%
Self Direction	7.13	1.26	0.37%	0.21%

Hispanic N=858

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.65	1.55	2.83%	3.98%
Practical Thinking	7.36	1.73	3.01%	4.25%
Systems Judgment	7.24	1.44	2.32%	3.14%
Sense of Self	7.44	1.26	0.31%	0.09%
Role Awareness	6.95	1.42	0.48%	0.36%
Self Direction	7.09	1.18	0.00%	0.58%



Hartman Value Profile/HVP Findings as of September 2010

Asian N=621

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.20	1.75	7.32%	8.48%
Practical Thinking	7.25	1.94	4.07%	5.31%
Systems Judgment	7.01	1.61	4.63%	5.44%
Sense of Self	6.95	1.39	4.59%	4.99%
Role Awareness	6.89	1.42	0.17%	1.03%
Self Direction	6.89	1.31	2.08%	2.66%

Hawaiian/Pacific Islander N=64

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.91	1.5	0.27%	1.42%
Practical Thinking	7.51	1.83	1.53%	2.77%
Systems Judgment	7.39	1.33	0.86%	1.67%
Sense of Self	7.45	1.1	0.48%	0.08%
Role Awareness	7.21	1.25	3.04%	2.26%
Self Direction	7.16	1	0.73%	0.15%

Disabled N=201

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.82	1.39	1.12%	0.13%
Practical Thinking	7.43	1.82	2.24%	1.33%
Systems Judgment	7.19	1.54	2.91%	2.12%
Sense of Self	7.22	1.35	1.9%	2.06%
Role Awareness	6.75	1.62	1.56%	2.20%
Self Direction	6.75	1.37	3.2%	3.89%



Hartman Value Profile/HVP Findings as of September 2010

Disabled Veteran N=105

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	8.04	1.31	1.04%	1.23%
Practical Thinking	7.56	1.8	1.01%	0.71%
Systems Judgment	7.27	1.65	2.02%	1.92%
Sense of Self	7.50	1.23	0.97%	0.75%
Role Awareness	6.64	1.65	2.65%	3.23%
Self Direction	7.07	1.57	0.23%	0.67%

Vietnam Veteran N=356

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.86	1.4	0.76%	0.57%
Practical Thinking	7.52	1.63	1.39%	1.09%
Systems Judgment	7.23	1.48	2.29%	2.19%
Sense of Self	7.46	0.95	0.58%	0.36%
Role Awareness	7.19	1.16	2.84%	2.26%
Self Direction	7.08	1.15	0.15%	0.60%

Other Veteran N=1277

Measurement	Mean	Standard Deviation	% Difference from Random Sample	% Difference from Non-Protected Group*
Empathetic Outlook	7.97	1.34	0.38%	0.57%
Practical Thinking	7.68	1.57	0.21%	0.50%
Systems Judgment	7.40	1.33	0.75%	0.65%
Sense of Self	7.44	1.18	0.39%	0.17%
Role Awareness	7.06	1.29	1.57%	0.98%
Self Direction	7.09	1.16	0.02%	0.43%

*The percentage difference from the non-protected group compares the protected subgroup to the non-protected subgroup within the same EEOC category.



About TTI

TTI Performance Systems, Ltd. is the worldwide leader in personal and professional assessment tools. With years of research and validation, TTI assessments are time-tested and proven to provide timely solutions for today's business challenges. Through a network of over 7000 Value Added Associates, TTI tools are utilized in over 50 countries and 26 languages to help businesses and organizations effectively manage their most valuable asset—people.

From recruitment to retention, TTI Performance Systems is a constant resource for new ideas and business applications. As a leader in the marketplace, we ensure the status of TTI assessments in the future by carefully managing our intellectual property and protecting the research and advancements TTI has made in the field. With several patents, copyrights and trademarks, TTI products are guaranteed to stand the test of time. Our staff is an expert resource in the assessment industry and continues to stay abreast of industry changes to enhance and expand the product line to provide unique solutions for the challenges businesses face everyday.

TTI Performance Systems, Ltd.
17785 North Pacesetter Way,
Scottsdale, Arizona 85255

tel. (800) 869-6908
fax. (800) 788-3472

www.TTIassessments.com