



The VSQ World Standard Group «World2013»

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What is a Standard Group?

A standard group is used as an indication of how a population will typically score on one of the scales of the VSQ. The indication is a range of typical scores. jobEQ uses this range on its feedback reports in order to give a relative indication of where a person scores in comparison to others. The standard group can be any group, such as a team of sales people, all employees of a certain organization, or the population of a country. In this case the standard group represents the working population of the world.

Once we know how a group typically scores, we can determine, in relative terms, whether a person's score is lower than, the same as, or higher than that of a particular population.

A VSQ standard group is calculated by taking the means of a sample of a group, adding one standard deviation to these means to find the upper limit of the standard group and subtracting one standard deviation from the mean to find the lower limit. If we presuppose that the population is approximately normally distributed, we know by definition that approximately two-thirds of the population will fall within the standard group range for the scale. In addition, we can assume that 1 out of 6 individuals will score higher than the standard group and 1 out of 6 will score lower.

Purpose of a Standard Group?

Standard groups are not intended to add statistical validity. Rather, standard groups help people understand the test results by showing how individuals compare to a given population or group. We use a standard group in VSQ reports to generate visual charts and/or textual explanations of a person's scores as those in the standard group would experience them.

Purpose of this paper

This paper will explain how the VSQ World Standard Group of 2013 is constructed. First the used sample is documented with essential demographics like country, gender, age and occupation. Further descriptives of the parameters and de difference with the previous standard group is explained.

About the sample

The 2013 World Standard Group is based on 3.389 persons working across the globe, who completed the VSQ questionnaires between December 2001 and February 2013. Respondents of 45 different countries participated in this norm group. Countries with less than 10 persons were not included. The sample was stratified using the US sample as baseline group: approximately a 1000 persons representing 315 million people or 1 person for each 315.000 inhabitants. This reflects for example that approximately 200 people are representative for 63 million people in the United Kingdom, 110 people for 35 million Canadians, 53 people for 16.8 million respondents from the Netherlands and so on.

Country

Table 1 shows the distribution of respondents per country (descending order). About 58% of the respondents of the 2013 standard group are from the Western World (15 European countries 22%, United States 29%, Canada 3%, Australia and New Zealand 3%).

In the sample we find an underrepresentation of highly populated countries like China and India who respectively represent 19.2 and 17.1% of the world population¹. In the VSQ World Sample only 1% Chinese and 4% Indian respondents are present. Also the African continent (15%) as Latin America is underrepresented in this sample: only South Africa and a few Latin American countries participated.

Table 1: respondents per country

Country	ISO-code	female	male	Sample needed	Sample included	Sample Percentage
United States	US	527	465	992	992	29.27%
Russian Federation	RU	226	225	451	451	13.31%
United Kingdom	UK	100	99	199	199	5.87%
South Africa	ZA	75	89	164	164	4.84%
Ukraine	UA	72	71	143	143	4.22%
India	IN	40	99	3808	139	4.10%
France	FR	54	64	118	118	3.48%
Canada	CA	56	54	110	110	3.25%
Germany	DE	50	44	94	94	2.77%
Australia	AU	36	36	72	72	2.12%
Kazakhstan	KZ	27	26	53	53	1.56%
Netherlands	NL	27	26	53	53	1.56%
Philippines	PH	26	19	291	45	1.33%
Italy	IT	17	23	192	40	1.18%
Spain	ES	24	13	147	37	1.09%
Romania	RO	22	15	60	37	1.09%
New Zealand	NZ	18	18	14	36	1.06%
Uzbekistan	UZ	22	14	93	36	1.06%
Belgium	BE	18	17	35	35	1.03%
Greece	GR	17	17	34	34	1.00%
Malaysia	MY	11	20	93	31	0.91%

¹ Official estimations (2010-2013) of population per country source: http://en.wikipedia.org/wiki/List_of_countries_by_population

Belarus	BY	16	14	30	30	0.89%
Poland	PL	16	14	121	30	0.89%
Sweden	SE	10	20	30	30	0.89%
China	CN	19	9	4260	28	0.83%
Denmark	DK	13	15	18	28	0.83%
Latvia	LV	19	8	7	27	0.80%
Singapore	SG	18	9	17	27	0.80%
Israel	IL	9	17	25	26	0.77%
Switzerland	CH	13	12	25	25	0.74%
Japan	JP	14	9	401	23	0.68%
Austria	AT	8	13	27	21	0.62%
Mexico	MX	12	9	353	21	0.62%
Azerbaijan	AZ	10	7	29	17	0.50%
Estonia	EE	8	9	4	17	0.50%
Brazil	BR	6	10	610	16	0.47%
Norway	NO	10	6	16	16	0.47%
Lithuania	LT	7	6	9	13	0.38%
Ireland	IE	6	6	14	12	0.35%
Armenia	AM	8	3	10	11	0.32%
Moldova, Republic of	MD	7	4	11	11	0.32%
Turkey	TR	6	5	238	11	0.32%
Argentina	AR	5	5	126	10	0.30%
Korea, Republic of	KR	5	5	157	10	0.30%
Thailand	TH	5	5	207	10	0.30%
Total		1.715	1.674	13.961	3.389	100.00%

Gender

The male-female ratio is 49.4% versus 50.6% distributing men and women equally over every country.

Age

The average age is 42.4 years old (SD=12.3). Table 2 shows the distribution in age categories. Eighteen percent (18%) of the respondents are Young Professionals, the largest group (37%) are people in their Mid-Career, almost one third are respondents in their Late Career. Only a small fraction (nearly 1%) is under 21 years old and almost 9% is aged above 60.

Table 2: age categories

VSQ World Standard group 2013	N	percentage
Youth < 21 years	28	0.83
Young Professional 21-30 years	614	18.12
Mid-Career 31-44 years	1.261	37.21
Late Career 45-60 years	1.088	32.10
Senior > 60 years	292	8.62
Unknown	106	3.13
Total	3.389	100.0

Occupation

Table 3 shows the distribution of the occupation categories. As one can see the occupations of the respondents are quite varied ranging from almost 0.56% (retired) to 9.15% (student). Two categories (not specified and other) account for more than 15% each indicating that their profession is unknown or other than the categories mentioned.

Table 3: occupation categories

Occupation	N	Percentage
[NOT SPECIFIED]	287	8.47%
Accounting/Finance	127	3.75%
Computer related (Internet)	84	2.48%
Computer related (other)	166	4.90%
Consulting	304	8.97%
Customer service/support	59	1.74%
Education/training	285	8.41%
Engineering	140	4.13%
Executive/senior management	205	6.05%
General administrative/supervisory	143	4.22%
Government/Military	42	1.24%
Homemaker	26	0.77%
Manufacturing/production/operations	85	2.51%
Other	242	7.14%
Professional (medical, legal, etc.)	176	5.19%
Research and development	65	1.92%
Retired	19	0.56%
Sales/marketing/advertising	239	7.05%
Self-employed/owner	224	6.61%
Student	310	9.15%
Tradesman/craftsman	33	0.97%
Unemployed/Between Jobs	128	3.78%
Grand Total	3.389	100.00%

Value Systems and Social Pattern Variables

Table 4 represents the absolute averages, standard deviations and standard errors of each parameter. Also the absolute difference with the previous standard group (2005) is given. All parameters show a sufficient variation in scores (standard deviations ranging from 12% to 20%). The standard error of the parameters varies from 0.20% to 0.35% with an average 0.27%. When .95 confidence intervals (i.e. mean \pm 1.96 SEM) are constructed around the sample means, one can conclude that in 95% of the cases the mean will fall within a margin less than 0.40% implicating that the estimation of the population means for the 18 variables using the standard group (n=3389) is very accurate.

The difference with the previous standard group ranges from 0% up to 5%. In comparison to the previous standard group the value systems Survival (G1) and Obedience (G4) make a downwards shift resulting in an absolute difference of 5% and 4%, also Particularism shows a small shift reflecting a 3% difference upwards. All three discrepancies result in a small effect size (respectively .33, .32 and .20). All other parameters have an absolute difference of 2% or less.

Table 4: averages and standard deviations (absolute)

	Pattern	Average	SD	SEM	Difference with STDGRP 2005
G1	Survival	45.72%	16.09%	0.28%	- 5%
G2	Safety	30.62%	12.55%	0.22%	+ 1%
G3	Use of Power	25.17%	14.26%	0.24%	- 2%
G4	Obedience	39.00%	11.48%	0.20%	- 4%
G5	Success	56.83%	13.82%	0.24%	0%
G6	Friends & Harmony	56.93%	13.41%	0.23%	- 2%
G7	Functional & Systemic Thinking	62.52%	12.97%	0.22%	+ 1%
G8	Global Village	75.60%	11.77%	0.20%	+ 2%
D1	Specific boundaries	56.23%	17.92%	0.31%	- 2%
D2	Diffuse boundaries	49.09%	15.27%	0.26%	0%
LB	Left Brain	62.54%	18.38%	0.32%	- 2%
RB	Right Brain	59.75%	16.91%	0.29%	+ 1%
M1	Match	41.01%	16.97%	0.29%	+ 2%
M2	Mismatch	37.74%	16.15%	0.28%	- 1%
U1	Universalism	46.30%	18.61%	0.32%	+ 2%
U2	Particularism	57.76%	15.53%	0.27%	+ 3%
NM	Efficiency	20.48%	20.44%	0.35%	+ 1%
FLEX	Flexibility	56.85%	15.70%	0.27%	- 2%

Conclusion

Despite the underrepresentation of non-Western countries, one can conclude that the VSQ World Standard Group 2013 can be used as a substantial reference group to compare the scores of an individual versus those of a large sample representing over 40 countries worldwide. The sample is well balanced and heterogeneous if you take into account gender, age and job occupation.

Looking at the descriptive statistics of the VSQ, we can report two important conclusions. First, we can state that the VSQ scales can measure quite accurately: all standard error measures are below 0.40%. Second, the scales show enough variation in scores (standard deviations up to 20%) to apprehend the heterogeneity of the standard group.

In comparison to the previous standard group of 2005, three major shifts are present. The first major finding is the lower result on the beige value system Survival, indicating that respondents of the 2013 sample are less focused on the basic necessities to survive, showing more attention to other people. The second important finding is a downward trend of the blue value system Obedience, indicating that the respondents of the 2013 sample nowadays find order and discipline less important than they did a small decade ago. A third finding is an upward trend of Particularism, suggesting that the 2013 sample prefers to accept several perceptions of reality and are less bound to formal rules than the sample of 2005.