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June 27, 2015

# **Motivation Insights June 2015 Reliability Study**

TTI Success Insights' June 2015 Motivation Insights assessment reliability study was conducted for the following languages:

Brazilian-Portuguese, Dutch, English-Australian, English-Canada, English UK, English US, French, German, Spanish-Americas, and Russian

The respondent data comes from TTISI's Internet Delivery Service (IDS), which is mostly comprised of a general business population for each of the languages. A random selection of males and females were collected from October 2014 to June 2015. To ensure the highest accuracy for each language, the IDS system allows selection of respondents with IP addresses from the native country for that language. Scale reliabilities were calculated using Cronbach's Alpha. Cronbach Alpha is considered one of the most appropriate statistical tests for reliability given the ranking of responses used to construct the scales. The scales are labeled as Theoretical, Utilitarian, Aesthetic, Social, Individual and Traditional. Based on these findings of this study, one may conclude that the Motivation Insights assessment is confirmed as a consistent and reliable measure of the scale constructs.

Submitted by

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## **Motivation Insights**

### June 2015 Reliability Study

#### Language Matrix Overview

		Cronbach Alpha						
	The.	Uti.	Aes.	Soc.	Ind.	Tra.		
Brazilian-Portuguese	0.82	0.77	0.78	0.87	0.81	0.83		
Dutch	0.85	0.86	0.80	0.89	0.83	0.82		
English-Australian	0.84	0.82	0.78	0.87	0.83	0.83		
English-Canada	0.83	0.83	0.80	0.88	0.83	0.82		
English UK	0.85	0.81	0.78	0.88	0.84	0.79		
English US	0.85	0.84	0.82	0.89	0.84	0.83		
French	0.76	0.76	0.71	0.86	0.82	0.71		
German	0.81	0.72	0.84	0.84	0.87	0.70		
Spanish-Americas	0.83	0.82	0.70	0.88	0.78	0.75		
Russian	0.82	0.79	0.81	0.84	0.81	0.72		

For Brazilian-Portuguese Participants (4/2015) - (6/2015); n = 920;  $n_m = 460$ ;  $n_f = 460$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

	Cronbach Alpha						
Scale	Total	Males	Females				
Theoretical	0.82	0.83	0.82				
Utilitarian	0.77	0.78	0.76				
Aesthetic	0.78	0.77	0.78				
Social	0.87	0.86	0.87				
Individualistic	0.81	0.77	0.83				
Traditional	0.83	0.83	0.83				

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations							
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional		
Theoretical	1.000							
Utilitarian	-0.212	1.000						
Aesthetic	-0.111	-0.246	1.000					
Social	-0.115	-0.520	0.089	1.000				
Individualistic	-0.204	0.325	-0.483	-0.405	1.000			
Traditional	-0.282	-0.262	-0.210	-0.136	-0.217	1.000		

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total				Males			Females	
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	53.86	9.01	0.30	53.23	9.06	0.42	54.50	8.93	0.42
Utilitarian	45.84	9.06	0.30	46.99	8.98	0.42	44.69	9.01	0.42
Aesthetic	33.21	9.17	0.30	32.02	8.86	0.41	34.40	9.34	0.44
Social	34.90	10.28	0.34	33.58	9.96	0.46	36.23	10.43	0.49
Individualistic	48.69	9.73	0.32	50.47	8.69	0.41	46.91	10.37	0.48
Traditional	35.49	10.35	0.34	35.71	10.47	0.49	35.28	10.24	0.48

For Dutch Participants (11/2014) - (6/2015); n = 604;  $n_m = 302$ ;  $n_f = 302$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

		Cronbach Alpha						
Scale	Total	Males	Females					
Theoretical	0.85	0.86	0.86					
Utilitarian	0.86	0.87	0.85					
Aesthetic	0.80	0.80	0.77					
Social	0.89	0.88	0.88					
Individualistic	0.83	0.84	0.81					
Traditional	0.82	0.81	0.83					

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations						
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional	
Theoretical	1.000						
Utilitarian	-0.135	1.000					
Aesthetic	-0.125	-0.423	1.000				
Social	-0.323	-0.524	0.206	1.000			
Individualistic	-0.101	0.397	-0.499	-0.465	1.000		
Traditional	-0.274	-0.370	-0.077	0.071	-0.350	1.000	

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total				Males		Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	45.40	10.86	0.44	45.87	10.88	0.63	44.92	10.84	0.62
Utilitarian	39.35	11.80	0.48	41.24	12.23	0.70	37.46	11.05	0.64
Aesthetic	45.11	10.22	0.42	42.72	10.26	0.59	47.51	9.62	0.55
Social	40.39	11.90	0.48	37.45	11.72	0.67	43.33	11.35	0.65
Individualistic	45.58	10.95	0.45	47.39	11.22	0.65	43.77	10.38	0.60
Traditional	36.17	11.11	0.45	37.33	10.88	0.63	35.01	11.25	0.65

For English-Australian Participants (2/2015) - (6/2015); n = 606;  $n_m = 303$ ;  $n_f = 303$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

	Cronbach Alpha					
Scale	Total	Males	Females			
Theoretical	0.84	0.82	0.86			
Utilitarian	0.82	0.83	0.81			
Aesthetic	0.78	0.73	0.80			
Social	0.87	0.87	0.87			
Individualistic	0.83	0.81	0.84			
Traditional	0.83	0.83	0.83			

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations						
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional	
Theoretical	1.000						
Utilitarian	-0.185	1.000					
Aesthetic	-0.183	-0.349	1.000				
Social	-0.127	-0.565	0.162	1.000			
Individualistic	-0.131	0.383	-0.515	-0.468	1.000		
Traditional	-0.318	-0.304	-0.053	-0.029	-0.315	1.000	

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total				Males		Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	48.30	10.56	0.43	48.59	10.05	0.58	48.01	11.05	0.63
Utilitarian	43.55	11.25	0.46	46.23	11.08	0.64	40.87	10.79	0.62
Aesthetic	40.25	10.46	0.42	37.71	9.40	0.54	42.79	10.85	0.62
Social	34.36	11.70	0.48	31.84	11.04	0.63	36.87	11.82	0.68
Individualistic	48.30	11.47	0.47	50.52	10.42	0.60	46.08	12.04	0.69
Traditional	37.25	11.27	0.46	37.11	11.23	0.65	37.39	11.33	0.65

For English-Canada Participants (2/2015) - (6/2015); n = 1,778;  $n_m = 889$ ;  $n_f = 889$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

		Cronbach Alpha						
Scale	Total	Males	Females					
Theoretical	0.83	0.85	0.83					
Utilitarian	0.83	0.84	0.79					
Aesthetic	0.80	0.77	0.81					
Social	0.88	0.87	0.87					
Individualistic	0.83	0.79	0.84					
Traditional	0.82	0.81	0.82					

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations							
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional		
Theoretical	1.000							
Utilitarian	-0.141	1.000						
Aesthetic	-0.188	-0.418	1.000					
Social	-0.138	-0.585	0.196	1.000				
Individualistic	-0.148	0.414	-0.522	-0.460	1.000			
Traditional	-0.298	-0.272	-0.052	-0.082	-0.302	1.000		

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total				Males		Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	49.07	10.36	0.25	49.17	10.34	0.35	48.97	10.38	0.35
Utilitarian	42.51	11.40	0.27	45.67	11.43	0.38	39.35	10.46	0.35
Aesthetic	39.52	10.90	0.26	36.85	10.02	0.34	42.19	11.09	0.37
Social	36.60	12.15	0.29	33.13	11.39	0.38	40.07	11.90	0.40
Individualistic	47.12	11.47	0.27	50.77	9.85	0.33	43.48	11.82	0.40
Traditional	37.18	11.21	0.27	36.42	10.96	0.37	37.94	11.40	0.38

For English UK Participants (1/2015) - (6/2015); n = 644;  $n_m = 322$ ;  $n_f = 322$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

	Cronbach Alpha					
Scale	Total	Males	Females			
Theoretical	0.85	0.86	0.84			
Utilitarian	0.81	0.82	0.79			
Aesthetic	0.78	0.75	0.78			
Social	0.88	0.86	0.88			
Individualistic	0.84	0.82	0.84			
Traditional	0.79	0.78	0.80			

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations							
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional		
Theoretical	1.000							
Utilitarian	-0.168	1.000						
Aesthetic	-0.199	-0.382	1.000					
Social	-0.132	-0.566	0.216	1.000				
Individualistic	-0.148	0.388	-0.535	-0.515	1.000			
Traditional	-0.358	-0.243	-0.051	-0.088	-0.211	1.000		

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total				Males		Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	46.97	10.83	0.43	46.67	11.05	0.62	47.27	10.62	0.59
Utilitarian	44.89	10.68	0.42	47.38	10.48	0.58	42.39	10.31	0.57
Aesthetic	40.26	10.23	0.40	38.10	9.47	0.53	42.42	10.52	0.59
Social	33.48	12.02	0.47	30.66	10.69	0.60	36.30	12.62	0.70
Individualistic	50.27	11.32	0.45	52.81	10.49	0.58	47.72	11.56	0.64
Traditional	36.13	10.45	0.41	36.37	9.97	0.56	35.89	10.92	0.61

For English US Participants (2/2015) - (6/2015); n = 25,104;  $n_m = 12,552$ ;  $n_f = 12,552$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

		Cronbach Alpha						
Scale	Total	Males	Females					
Theoretical	0.85	0.86	0.85					
Utilitarian	0.84	0.84	0.82					
Aesthetic	0.82	0.80	0.82					
Social	0.89	0.88	0.89					
Individualistic	0.84	0.81	0.85					
Traditional	0.83	0.82	0.83					

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations							
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional		
Theoretical	1.000							
Utilitarian	-0.137	1.000						
Aesthetic	-0.162	-0.412	1.000					
Social	-0.188	-0.555	0.178	1.000				
Individualistic	-0.135	0.386	-0.531	-0.438	1.000			
Traditional	-0.314	-0.257	-0.068	-0.086	-0.276	1.000		

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total				Males		Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	47.64	10.99	0.07	47.86	10.96	0.10	47.42	11.01	0.10
Utilitarian	43.30	11.60	0.07	45.92	11.41	0.10	40.67	11.20	0.10
Aesthetic	37.66	11.33	0.07	35.26	10.52	0.09	40.05	11.59	0.10
Social	37.20	12.62	0.08	34.29	11.76	0.10	40.12	12.77	0.11
Individualistic	47.09	11.74	0.07	49.73	10.69	0.10	44.46	12.14	0.11
Traditional	39.11	11.53	0.07	38.94	11.18	0.10	39.28	11.86	0.11

For French Participants (4/2015) - (6/2015); n = 572;  $n_m = 286$ ;  $n_f = 286$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

	Cronbach Alpha						
Scale	Total	Males	Females				
Theoretical	0.76	0.78	0.75				
Utilitarian	0.76	0.77	0.73				
Aesthetic	0.71	0.65	0.74				
Social	0.86	0.85	0.87				
Individualistic	0.82	0.80	0.83				
Traditional	0.71	0.68	0.73				

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations							
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional		
Theoretical	1.000							
Utilitarian	-0.144	1.000						
Aesthetic	-0.074	-0.400	1.000					
Social	-0.155	-0.537	0.090	1.000				
Individualistic	-0.226	0.413	-0.553	-0.480	1.000			
Traditional	-0.293	-0.350	0.050	-0.045	-0.268	1.000		

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total				Males		Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	50.33	8.81	0.37	50.26	9.13	0.54	50.41	8.49	0.50
Utilitarian	45.72	9.54	0.40	47.59	9.64	0.57	43.85	9.08	0.54
Aesthetic	44.43	8.96	0.37	43.03	8.28	0.49	45.82	9.39	0.56
Social	34.61	11.25	0.47	32.84	10.57	0.63	36.37	11.64	0.69
Individualistic	42.27	10.77	0.45	44.49	10.02	0.59	40.05	11.05	0.65
Traditional	34.64	8.86	0.37	33.78	8.39	0.50	35.50	9.24	0.55

For German Participants (4/2015) - (6/2015); n = 1,598;  $n_m = 799$ ;  $n_f = 799$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

	Cronbach Alpha					
Scale	Total	Males	Females			
Theoretical	0.81	0.82	0.81			
Utilitarian	0.72	0.70	0.70			
Aesthetic	0.84	0.82	0.84			
Social	0.84	0.81	0.85			
Individualistic	0.87	0.83	0.88			
Traditional	0.70	0.67	0.73			

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations							
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional		
Theoretical	1.000							
Utilitarian	-0.085	1.000						
Aesthetic	-0.332	-0.505	1.000					
Social	-0.111	-0.553	0.268	1.000				
Individualistic	-0.116	0.459	-0.630	-0.509	1.000			
Traditional	-0.306	-0.289	0.180	-0.085	-0.355	1.000		

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total			Males			Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	49.83	9.91	0.25	49.36	9.91	0.35	50.31	9.88	0.35
Utilitarian	44.40	9.09	0.23	47.15	8.57	0.30	41.64	8.75	0.31
Aesthetic	41.16	11.47	0.29	37.58	10.45	0.37	44.73	11.34	0.40
Social	34.02	10.20	0.26	31.67	9.04	0.32	36.38	10.74	0.38
Individualistic	46.96	12.56	0.31	50.98	10.59	0.37	42.93	13.09	0.46
Traditional	35.63	8.91	0.22	35.26	8.50	0.30	36.00	9.29	0.33

For Spanish-Americas Participants (3/2015) - (6/2015); n = 548;  $n_m = 274$ ;  $n_f = 274$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

	Cronbach Alpha							
Scale	Total	Males	Females					
Theoretical	0.83	0.82	0.84					
Utilitarian	0.82	0.82	0.83					
Aesthetic	0.70	0.66	0.73					
Social	0.88	0.87	0.89					
Individualistic	0.78	0.76	0.80					
Traditional	0.75	0.73	0.77					

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations								
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional			
Theoretical	1.000								
Utilitarian	-0.172	1.000							
Aesthetic	-0.188	-0.327	1.000						
Social	-0.283	-0.542	0.148	1.000					
Individualistic	-0.182	0.310	-0.395	-0.420	1.000				
Traditional	-0.155	-0.344	-0.094	0.010	-0.341	1.000			

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total			Males			Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	49.56	10.22	0.44	49.71	9.74	0.59	49.42	10.69	0.65
Utilitarian	43.86	11.18	0.48	44.95	11.02	0.67	42.77	11.24	0.68
Aesthetic	36.95	8.70	0.37	35.85	8.11	0.49	38.04	9.13	0.55
Social	36.60	11.79	0.50	35.41	11.37	0.69	37.80	12.10	0.73
Individualistic	49.50	10.05	0.43	51.10	9.43	0.57	47.91	10.41	0.63
Traditional	35.52	9.55	0.41	34.97	9.03	0.55	36.07	10.04	0.61

For Russian Participants (10/2014) - (6/2015); n = 1,284;  $n_m = 642$ ;  $n_f = 642$ 

Table 1. Cronbach Alpha for Motivation Insights' Scales for Total Sample and by Gender Groups

	Cronbach Alpha							
Scale	Total	Males	Females					
Theoretical	0.82	0.84	0.80					
Utilitarian	0.79	0.80	0.79					
Aesthetic	0.81	0.77	0.82					
Social	0.84	0.85	0.83					
Individualistic	0.81	0.82	0.80					
Traditional	0.72	0.72	0.71					

Table 2. Correlations among Motivation Insights' Scales for Total Sample

	Scale Correlations								
Scale	Theoretical	Utilitarian	Aesthetic	Social	Individualistic	Traditional			
Theoretical	1.000								
Utilitarian	-0.163	1.000							
Aesthetic	-0.148	-0.299	1.000						
Social	-0.220	-0.505	0.072	1.000					
Individualistic	-0.268	0.286	-0.498	-0.398	1.000				
Traditional	-0.155	-0.307	-0.220	0.005	-0.161	1.000			

Table 3. Descriptive Statistics on Motivation Insights' Scales for Total Sample and by Gender Groups

	Total			Males			Females		
Scale	Mean	STD	StErr	Mean	STD	StErr	Mean	STD	StErr
Theoretical	49.23	9.74	0.27	49.48	10.12	0.40	48.98	9.35	0.37
Utilitarian	51.79	9.70	0.27	52.74	9.69	0.38	50.84	9.63	0.38
Aesthetic	40.83	10.87	0.30	37.79	9.82	0.39	43.86	11.03	0.44
Social	30.83	10.54	0.29	29.88	10.79	0.43	31.78	10.20	0.40
Individualistic	43.75	10.84	0.30	45.46	10.80	0.43	42.04	10.61	0.42
Traditional	35.57	8.58	0.24	36.65	8.55	0.34	34.50	8.48	0.33