

Influence Style IndicatorTM Research and Development Report

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Influence Style IndicatorTM

Introduction

This Research and Development Report is designed as a narrative outlining the development of the Influence Style Indicator assessment tool. It includes the process used to develop the tool, including the development of concepts, evolution of the model, and the collection and analysis of data. The intention is that this document provides a layman's explanation of the development and validation process for the Influence Style Indicator.

Development Process

The *Influence Style Indicator* (ISI) assessment was developed by Discovery Learning using a theoretical framework. The theoretical framework evolved from a review of the influence literature and identification of managerial influence concepts. See Influence Literature Review (p. 15) from Discovery Learning. The concepts were clustered into six categories and provided a descriptive title. Forty six items were developed to measure the clusters or concept. This conceptual framework is presented in the following table.

Theoretical Model

Literature Concepts - Clustered	Descriptive Title
Reason, logic, supporting data, explain rationale, tactician	Rationalizing (7 items)
Pushing, asserting, demand, sanctions, reward & punishment, persuasiveness, persistence, authority, assertive persuasion, shotgun	Asserting (8 items)
Disengaging, bystander	Defusing (9 items)
Joining, coalitions, consultation, reciprocation, social validation, coalition building, participation & trust, participative management style, encouraging collaboration	Bridging (8 items)
Bargaining, exchange	Negotiating (7 items)
Attracting, ingratiation, upward appeal, common vision, liking/friendship, clarity of direction	Inspiring (7 items)

Item and Scale Identification

The initial analyses were conducted on a sample of 294 surveys. We first examined the distributions of the 46 items and identified 14 items with very little variability, i.e., greater than 80% of respondents rated the item *often* or *very often* (see Table 1). We then calculated Cronbach's alpha for the overall scale and for each conceptual area (subscale). Alphas were above the generally accepted standard of .85 for the overall scale and for half of the subscales. Bridging (α = .82), Negotiating (α = .78), and Defusing (α = .67) fell below .85 (see Table 2).

Finally, we performed a factor analysis with varimax rotation. The four subscales of Rationalizing, Asserting, Bridging and Inspiring held up very well with the factor analysis. The subscale of Negotiating held together fairly well but two items within this subscale did not load on any factor. The Defusing subscale was not supported by the factor analysis: 4 of its items loaded with Bridging and 5 of its items did not load on any factor (see Table 3).

Using the information from the factor analysis, Cronbach's alphas, and item distributions, the assessment was reduced to 30 items within 5 subscales (eliminated Defusing). Each subscale had 6 items so subscale scores could range from 6 to 30. Cronbach's alphas on the 30-item assessment ranged from .77 to .88 (see Table 4). The factor analysis was clean with all items loading in their assigned subscale except for 2 items in the Negotiating subscale that did not load on any factor (see Table 5).

From this 5-subscale, 30-item version, 4 items were randomly selected from each of the 5 subscales, leaving a total of 20 items which were used for a forced-choice version of the instrument. Cronbach's alphas on this 20-item version ranged from .76 to .83 (see Table 6). Correlations between the 20-item and 30-item versions were extremely high: Pearson's r between the overall scales was .97 and the correlations between corresponding subscales ranged from .93 to .97 (see Table 7).

Conversion to Force-Choice Assessment

The research to identify items and constructs used a Likert Scale (1-5). Twenty items (twenty item version) were identified with four loading on each of the five influence constructs, as described above. To create a style or preference assessment the items were converted from the Likert Scale version of the assessment to a forced-choice assessment. The forced-choice version of the instrument consisted of pairs of items (a vs. b). Each of the four items from each subscale was randomly paired with one of the four items from each of the other subscales. This produces an equal opportunity to select each of the influence styles. This yielded a 40-item forced-choice instrument. Each construct is presented for selection sixteen times so subscale or construct scores could range from 0 to 16. See final pages of Appendix A for the 40-item forced-choice instrument.

The forced-choice assessment has some advantages. Since the assessment is measuring preference, it creates a clearer pronouncement of preference if and when a style preference exist.

If there is no preference among the five constructs then that will also be revealed. This is not an assessment of how well an individual thinks he/she performs each of the five constructs, but a measure of preference. With the Likert Scale assessment individuals can rate themselves as preferring all five constructs without having to select their preferences. A forced-choice assessment provides a more pronounced picture of preferences if and when they exist.

Frequency Distributions

Frequency of preference was calculated for the 5 subscales. Frequency of preference shows the frequency with which various strengths of preference occur across all subscales. Each scale has the potential for being scored between 0 and 16. A score of 16 represents the strongest possible preference (see Table 8).

Gender Differences

Gender preference was explored on a sample of 4,447 people. This sample represented 1,994 females and 2,452 males. This preference was measured by calculating the mean score for the 5 scales for men and women (see Table 9). Men show a significantly stronger preference for Rationalizing and Asserting while women show a significantly stronger preference for Negotiating, Inspiring and Bridging.

Test-Retest Validity

Test-Retest Reliability was measured for 45 ISI respondents who took the survey a second time between six weeks and three months of their initial ISI administration. This data was collected between June 2011 and August 2012. All five influence constructs proved to be valid over time with Pearson r's ranging from .54 to .72 (see Table 10).

Concurrent Validity

Three measures were used for concurrent validity. The first comparison was with two internal items that were randomly dropped from each ISI category to shorten the assessment from 30 to 20 items. Next each of the five ISI categories was compared to Change Style Indicator (CSI) and Myers Briggs Type Indicator (MBTI).

Using internal items - Ten items, two for each style, were dropped from the survey to shorten the number of survey items from 30 to 20. The ten dropped items were selected randomly. The correlations between two dropped items from each influence style were compared with the four retained items for each influence style as a measure of concurrent validity.

For Rationalizing (Table 11), Asserting (Table 12), and Inspiring (Table 15), there are moderate to fairly high item correlations between the retained and non-retained items. Basically, the non-retained items are fairly closely associated with the retained items.

For Negotiating (Table 13), the correlations with Item #16 (dropped) are not that great, except for its correlations with item #18.

For Bridging (Table 14), all the correlations are moderate except for the correlation of item #29 (retained) with #26 (dropped) which is low.

In general, one might conclude that the choice of non-retained items was random, i.e., not selected because they weren't "as good" as the other items. This random selection supports the use of psychometric properties calculated on the 30-item instrument with the 20-item instrument.

Using Change Style Indicator – Table 16 displays the average ISI scores across the five scales for Change Style Indicator styles; Conservers, Pragmatist, and Originators. Conservers are significantly more likely to use Rationalizing than Originators. Conservers are significantly less likely to use Asserting than either Pragmatist or Originators. Originators are significantly more likely to use Inspiring than Pragmatist or Conservers.

Using Myers Briggs Type Indicator – Tables 17 displays the significant relationships between ISI styles and MBTI preferences. Sensors, thinkers and judgers are more likely to score significantly higher on Rationalizing than Intuitives, Feelers and Perceivers. Extroverts are likely to score significantly higher on Asserting than Introverts. Intuitives are more likely to score significantly higher on Inspiring than Sensors.

Percentile Comparisons and Normative Data

The current ISI norms are based on 6,404 individuals who completed the assessment. Eighty one nationalities are represented in the norms and 73% of the individuals represented are from the United States. Table 18 displays the average score, standard deviation and the 25th, 50th and 75th percentiles scores for each of the five influence styles. Bridging is the most preferred of the influence styles and negotiating is the least preferred style. Therefore, each of the five styles has its own norms.

Subscale Differences by Nationality

Eighty one nationalities are represented in the norms and 73% of the individuals represented are from the United States. Four countries has sufficient data to analyze and compare against each other; Canada, India, Singapore and the United States. ANOVAs produced significant multivariate analyses of variance (MANOVA) -- the specific ANOVA results for Nationality are shown in Table 19 with explanation of the specific group differences. Singapore is significantly higher on Rationalizing than Canada, India and the United States. The United States is significantly higher on Negotiating than Asserting than Canada and Singapore. India is significantly higher on Negotiating than

the United States, Canada and Singapore. Singapore is significantly higher on Negotiating than the United States. Canada and India are significantly higher on Inspiring than the United States and Singapore. The United States is significantly higher on Inspiring than Singapore. With Bridging there are not significant differences among these four countries.

Normative Data by Nationality

Tables 20-23 displays normative data for Canada (20), India (21), Singapore (22) and the United States (23). These are the four countries for which sufficient data exists to calculate norms. This will be updated as more data is collected.

Subscale Differences within the United States

United States participants were segmented by ancestry; European American, African American, and Hispanic/Latino American. These were the only three ancestry groups with sufficient data for analysis. ANOVAs produced significant multivariate analyses of variance (MANOVA). The specific ANOVA results for US ancestry are shown in Table 24 with explanation of the specific group differences. European Americans score significantly higher on Rationalizing than African Americans. African Americans score significantly higher on Bridging than European Americans.

Subscale Differences by Age Groups

The data was analyzed by age groups; 20-29, 30-39, 40-49, 50-59 and 60 and over. ANOVAs produced significant multivariate analyses of variance (MANOVA) -- the specific ANOVA results for age groups are shown in Table 25 with explanation of the specific group differences. 60 and over are significantly lower on Rationalizing than 20-29, 30-39 and 40-49. 50-59 are significantly lower on Rationalizing than 30-39 and 40-49 is significantly lower on Asserting than 40-49. 20-29 is significantly higher on Negotiating than 40-49. 50-59 and 60 and over are significantly higher on Bridging than 30-39 and 40-49. 50-59 and 60 and over are significantly higher on Bridging than 30-39 and 40-49.

Note for future research: For Bridging, the 60 and over group is not significantly different (higher) from any other most likely because the N for that group is so small. The is probably also the reason that 20-29 is not significantly different (lower) than any other age group for Asserting. As more data is collect this will be revisited.

Table 1
Influence Style Indicator:
Items with Little Variability

N = 294

Subscale	Item	% Rated Often or Very Often
	#1 – use logic to support point of view	87%
	#2 - suggest logical solutions to problems	87%
	#3 – present rational arguments	78%
	#4 – rely on facts to convince others	66%
Rationalizing	#5 – use rational arguments to support position	79%
	#6 – organize presentations using solid logic	65%
	#7 – use data to support arguments	61%
	#8 – point out fallacies in people's arguments	30%
	#9 – make sure others understand my view	68%
	#10 – put forward my ideas even if unpopular	57%
	#11 – challenge ideas/suggestions if disagree	61%
	#12 – make sure my position is heard	55%
Asserting	#13 – push others to discuss disagreement	39%
	#14 – let people know where I stand	49%
	#15 – argue strongly when think right	66%
	#16 – will compromise when necessary	72%
	#17 – identify points of common interest	81%
	#18 – make concessions when really important	70%
	#19 – show people benefit of supporting my ideas	60%
Negotiating	#20 – get support my ideas/offer to help them	43%
	#21 – bargain to reach agreement when important	53%
	#22 – make tradeoffs to get things accomplished	31%

Subscale	Item	% Rated Often or Very Often
	#23 – show appreciation for other's issues/needs	87%
	#24 – connect with others who share my view	83%
	#25 – acknowledge needs/concerns of others	80%
	#26 – share my motives to gain support	73%
Bridging	#27 – like to reach mutual agreement	86%
	#28 – work hard to establish climate of trust	93%
	#29 – listen carefully to what others say	83%
	#30 – give people credit for their ideas	82%
	#31 – use stories/anecdotes to support my case	62%
	#32 – like to focus on bigger picture	84%
	#33 – enthusiastic presenting my ideas	84%
	#34 – appeal to people's hopes/dreams	49%
Inspiring	#35 – help others see exciting possibilities	68%
Inspiring	#36 – help people see the common good	80%
	#37 – communicate my vision for best outcome	82%
	#38 – delay discussing contentious issues	56%
	#39 – reduce tension by changing subject	21%
	#40 – inject humor into disagreement	52%
	#41 – patient & calm in tense situations	54%
	#42 – take timeout from disagreement	44%
Defusing	#43 – prefer avoid nonproductive discussions	64%
Dordoning	#44 – take time to think about other's suggestions	63%
	#45 – alter my position to avoid blow up	18%
	#46 – mediate when others in heated disagreement	56%

Little variability	
Little variability	

Table 2
Influence Style Indicator:
Cronbach's Alphas for Original Scale N = 294

Scale/Category	# Items	Alpha
Overall Scale	46	.91
Rationalizing	7	.89
Asserting	8	.86
Negotiating	7	.78
Bridging	8	.82
Inspiring	7	.86
Defusing	9	.67

Table 3 $Influence \ Style \ Indicator:$ Factor Analysis with Varimax Rotation for Original Scale N=294

		Factor				
Subscale	Item	#1	#2	#3	#4	#5
	#1 – use logic to support point of view		XX			
	#2 - suggest logical solutions to problems		XX			
	#3 – present rational arguments		XX			
	#4 – rely on facts to convince others		XX			
Rationalizing	#5 – use rational arguments to support position		XX			
	#6 – organize presentations using solid logic		XX			
	#7 – use data to support arguments		XX			
	#8 – point out fallacies in people's arguments			Х		
	#9 – make sure others understand my view			Х		
	#10 – put forward my ideas even if unpopular			XX		
Asserting	#11 – challenge ideas/suggestions if disagree			XX		
	#12 – make sure my position is heard			XX		
	#13 – push others to discuss disagreement			XX		
	#14 – let people know where I stand			XX		
	#15 – argue strongly when think right			XX		

			Factor			
Subscale	Item	#1	#2	#3	#4	#5
	#16 – will compromise when necessary					
	#17 – identify points of common interest	Х				
	#18 – make concessions when really important					Х
Negotiating	#19 – show people benefit of supporting my ideas					
	#20 – get support my ideas/offer to help them					XX
	#21 – bargain to reach agreement when important					XX
	#22 – make tradeoffs to get things accomplished					XX
	#23 – show appreciation for other's issues/needs	Х				
	#24 – connect with others who share my view					
	#25 – acknowledge needs/concerns of others	XX				
Bridging	#26 – share my motives to gain support	Х				
	#27 – like to reach mutual agreement	X				
	#28 – work hard to establish climate of trust	XX				
	#29 – listen carefully to what others say	XX				
	#30 – give people credit for their ideas	X				

		Factor				
Subscale	Item	#1	#2	#3	#4	#5
	#31 – use stories/anecdotes to support my case				Х	
	#32 – like to focus on bigger picture				Х	
	#33 – enthusiastic presenting my ideas				XX	
Inspiring	#34 – appeal to people's hopes/dreams				XX	
	#35 – help others see exciting possibilities				XX	
	#36 – help people see the common good	Х				
	#37 – communicate my vision for best outcome				XX	
	#38 – delay discussing contentious issues					
	#39 – reduce tension by changing subject					
	#40 – inject humor into disagreement					
	#41 – patient & calm in tense situations	Х				
	#42 – take timeout from disagreement	Х				
Defusing	#43 – prefer avoid nonproductive discussions					
	#44 – take time to think about other's suggestions	Х				
	#45 – alter my position to avoid blow up					
	#46 – mediate when others in disagreement	Х				

XX = factor loading .60 or higher

X = factor loading .40 - .59

Highlighted items did not load on any factor

Table 4 Influence Style Indicator: Cronbach's Alphas for Scale With 30 Items N = 294

Scale/Category	# Items	Alpha
Overall Scale	30	.89
Rationalizing	6	.88
Asserting	6	.85
Negotiating	6	.77
Bridging	6	.79
Inspiring	6	.84

Table 5 Influence Style Indicator: Factor Analysis with Varimax Rotation For Scale With 30 Items

N = 294

				Factor		
Subscale	Item	#1	#2	#3	#4	#5
	#1 – use logic to support point of view	XX				
	#2 - suggest logical solutions to problems	XX				
	#3 – present rational arguments	XX				
Rationalizing	#4 – rely on facts to convince others	XX				
	#5 – use rational arguments to support position	XX				
	#6 – organize presentations using solid logic	XX				
	#10 – put forward my ideas even if unpopular		XX			
	#11 – challenge ideas/suggestions if disagree		XX			
	#12 – make sure my position is heard		XX			
Asserting	#13 – push others to discuss disagreement		XX			
	#14 – let people know where I stand		XX			
	#15 – argue strongly when think right		XX			
	#16 – will compromise when necessary					
	#18 – make concessions when really important					Х
Negotiating	#19 – show people benefit of supporting my ideas					
	#20 – get support my ideas/offer to help them					XX
	#21 – bargain to reach agreement when important					XX
	#22 – make tradeoffs to get things accomplished					XX

		Factor				
Subscale	Item	#1	#2	#3	#4	#5
	#23 – show appreciation for other's issues/needs				Х	
	#25 – acknowledge needs/concerns of others				XX	
Bridging	#26 – share my motives to gain support				Х	
	#27 – like to reach mutual agreement				XX	
	#28 – work hard to establish climate of trust				XX	
	#29 – listen carefully to what others say				Х	
	#31 – use stories/anecdotes to support my case			Х		
	#32 – like to focus on bigger picture			Х		
	#33 – enthusiastic presenting my ideas			XX		
Inspiring	#34 – appeal to people's hopes/dreams			XX		
	#35 – help others see exciting possibilities			XX		
	#37 – communicate my vision for best outcome			XX		

XX = factor loading .60 or higher

X = factor loading .40 - .59

Highlighted items did not load on any factor

Table 6
Influence Style Indicator:
Cronbach's Alphas for Scale with 20 Items N = 294

Scale/Category	# Items	Alpha
Overall Scale	20	.85
Rationalizing	4	.84
Asserting	4	.82
Negotiating	4	.77
Inspiring	4	.83
Bridging	4	.76

Table 7
Influence Style Indicator:
Correlations Between 20-item and 30-item Versions N = 294

	Pearson's
Scale/Category	r
Overall Scale	.97
Rationalizing	.97
Asserting	.96
Negotiating	.95
Inspiring	.96
Bridging	.93

Table 8
Influence Style Indicator:
Forced Choice Version
Frequency of Strength Preference for all 5 Styles N = 320

Preference Score	1-4	5-8	912	13-16
Frequency of Occurrence	15%	40%	30%	15%

Table 9
Influence Style Indicator:
Gender Differences by Style

	Rationalizing	Asserting	Negotiating	Inspiring	Bridging
Female (N=1994)	8.82	6.02	6.00	7.71	11.46
Males (N=2453)	10.09	6.36	5.46	7.05	11.03
Gender Difference	P<0.0001	p=0.0005	P<0.0001	P<0.0001	P<0.0001
Significant Differences	Men are significantly higher than women	Men are significantly higher than women	Women are significantly higher than men	Women are significantly higher than men	Women are significantly higher than men

Table 10 Influence Style Indicator: Test-Retest Correlations of 20-Item Forced-Choice Version October 2012 N=45

	Pearson's r
Scale/Category	
Rationalizing	.72
Asserting	.70
Negotiating	.54
Inspiring	.69
Bridging	.72

Table 11
Pearson Correlations Coefficients of Retained vs. Dropped Items
ISI Rationalizing N = 294

	Dropped		
Retained	IS1	IS3	
IS2 I suggest logical solutions to problems	0.67702	0.59733	
IS4 I rely on facts to convince others	0.48832	0.50317	
IS5 I use rational arguments support position	0.57526	0.65802	
IS6 I organize presentations using solid logic	0.53121	0.51684	

Table 12
Pearson Correlations Coefficients of Retained vs. Dropped Items
ISI Asserting N = 294

	Dropped			
Retained	IS13	IS15		
IS10 I put forward my ideas even unpopular	0.44701	0.41881		
IS11 I challenge ideas/suggestions I disagree	0.55644	0.46117		
IS12 I want to make sure my position is heard	0.47722	0.44536		
IS14 I let people know exactly where I stand	0.51074	0.54231		

Table 13
Pearsons Correlations Coefficients of Retained vs. Dropped Items ISI Negotiating N=294

	Dropped		
Retained	IS16	IS19	
IS18 I make concessions get really important	0.44805	0.30237	
IS20 I get support my ideas/offer help them	0.16603	0.48557	
IS21 I bargain reach agreement when important	0.24723	0.38271	
IS22 I exchange favors get things accomplished	0.07731	0.25376	

Table 14
Pearsons Correlations Coefficients of Retained vs. Dropped Items ISI Bridging N=294

	Dropped		
Retained	IS26	IS27	
IS23 I show appreciation other's issues/needs	0.27417	0.32362	
IS25 I acknowledge needs/concerns of others	0.42100	0.40184	
IS28 I work hard to establish climate of trust	0.31409	0.44032	
IS29 I listen carefully to what others say	0.19540	0.34586	

Table 15 Correlations of Retained vs. Not Retained Items ISI Inspiring N=294

	Dropped		
Retained	IS31	IS32	
IS33 I am enthusiastic presenting my ideas	0.47756	0.38224	
IS34 I appeal to people's hope/dreams	0.45394	0.35720	
IS35 I help others see exciting possibilities	0.42670	0.38091	
IS37 I communicate my vision for best outcome	0.40631	0.48188	

Table 16
Influence Styles and Change Style Indicator

1					
	Rationalizing	Asserting	Negotiating	Inspiring	Bridging
Conservers (N=39)	10.49	4.62	6.62	7.72	10.44
Pragmatists (N=69)	9.28	6.67	6.01	7.31	10.59
Originators (N=22)	7.04	7.78	5.83	10.09	8.74
Significant Differences	Originators are significantly lower than Conservers & Pragmatists	Conservers are significantly lower than Pragmatist & Originators	No significant difference	Originators are significantly greater than Conservers & Pragmatists	No significant difference

Tables 17
Influence Styles and MBTI

MBTI	Rationalizing	Asserting	Negotiating	Inspiring	Bridging
Introvert (N=49)	9.92	4.94	6.49	7.33	11.35
Extrovert (N=57)	8.33	6.70	6.28	8.61	9.94
Intuitive (N=55)	7.75	5.96	6.45	8.85	10.82
Sensor (N=51)	10.49	5.80	6.29	7.12	10.12
Thinker (N=66)	10.30	5.79	5.85	7.61	10.20
Feeler (N=40)	7.03	6.05	7.25	8.70	10.95
Judger (N=66)	9.86	5.26	6.74	7.62	10.52
Perceiver (N=40)	7.75	6.93	5.78	8.68	10.43

Statistically significant	
Direction of trend	

 $\label{eq:Table 18} Table~18$ Influence Style Subscale Normative Data, N=6406

ISI	Average	Standard	25 th	50 th	75 th
Subscale		Deviation	Percentile	Percentile	Percentile
Rationalizing	9.6	3.5	7	10	12
Asserting	6.3	3.3	4	6	8
Negotiating	5.7	3.4	3	5	8
Inspiring	7.2	3.3	5	7	9
Bridging	11.2	3.3	9	12	14

Table 19
ISI Subscale Differences by Nationality

Nationality	Rationalizing	Asserting	Negotiating	Inspiring	Bridging
Canada (N=298)	8.87	5.86	5.58	8.33	11.36
India (N=102)	9.75	5.84	4.29	8.58	11.54
Singapore (N=152)	11.12	5.54	6.32	6.43	10.58
United States N=3121)	9.60	6.40	5.49	7.22	11.29
Nationality Difference	P < 0.0001	P < 0.0003	P < 0.0001	P < 0.0001	NSD
Differences	Singapore significantly higher than Canada, India & US	US significantly higher than Canada & Singapore	India significantly lower than US, Canada & Singapore Singapore significantly higher than US	Canada & India significantly higher than US & Singapore US significantly higher than Singapore	

Table 20 ISI Subscale Normative Data Canada, N = 298

ISI	Average	Standard Deviation	25 th	50 th	75 th
Subscale		Deviation	Percentile	Percentile	Percentile
Rationalizing	8.87	3.5	7	9	11
Asserting	5.86	3.3	3	5	8
Negotiating	5.58	3.2	3	5	8
Inspiring	8.33	3.2	6	8	11
Bridging	11.36	3.2	9	12	14

 $\label{eq:Table 21} \textbf{ISI Subscale Normative Data India, N} = \textbf{102}$

ISI	Average	Standard	25 th	50 th	75 th
Subscale		Deviation	Percentile	Percentile	Percentile
Rationalizing	9.75	3.1	7	10	12
Asserting	5.84	2.7	4	6	8
Negotiating	4.29	3.4	1	4	6
Inspiring	8.58	3.0	7	8	10
Bridging	11.54	2.6	10	12	13

Table 22

ISI Subscale Normative Data Singapore, N = 152

ISI Subscale	Average	Standard Deviation	25 th Percentile	50 th Percentile	75 th Percentile
Rationalizing	11.12	3.1	9	11	13
Asserting	5.54	3.3	3	5	8
Negotiating	6.32	3.6	3	6	9
Inspiring	6.43	3.3	4	6	9
Bridging	10.58	3.3	9	11	13

Table 23

ISI Subscale Normative Data United States, N = 3132

ISI Subscale	Average	Standard Deviation	25 th Percentile	50 th Percentile	75 th Percentile
Rationalizing	9.60	3.5	7	10	12
Asserting	6.40	3.3	4	6	9
Negotiating	5.49	3.3	3	5	8
Inspiring	7.22	2 3.4 5		7	10
Bridging	11.29	3.4	9	12	14

Table 24
ISI Subscale Differences by US Ancestral Groups

Ancestral Group	Rationalizing	Asserting	Negotiating	Inspiring	Bridging
African American (N=315)	8.87	6.41	5.18	7.47	12.06
European American (N=1689)	9.69	6.31	5.65	7.28	11.08
Hispanic/Latino American (N=173)	9.07	6.20	5.81	7.49	11.43
Ancestral Group Difference	P = 0.0002	NSD	NSD	NSD	P < 0.0001
Differences	European Americans significantly higher than African Americans				African Americans significantly higher than European Americans

Table 25
ISI Subscale Differences by Age Groups

Age Group	Rationalizing	Asserting	Negotiating	Inspiring	Bridging
20-29 (N = 156)	9.45	5.47	6.44	7.47	11.16
30-39 (N = 1159)	10.07	6.15	5.78	7.08	10.92
40-49 (N = 1751)	9.83	6.40	5.47	7.14	11.15
50-59 (N = 993)	8.73	6.16	5.80	7.73	11.59
Over 60 (N = 179)	8.25	5.93	5.91	8.28	11.62
Age Group Difference	P < 0.0001	P = 0.0028	P = 0.0014	P < 0.0001	P < 0.0001
Differences	60 & over are significantly lower than 20's, 30's & 40's 50's significantly lower than 30's & 40's	20's significantly lower than 40's	20's significantly higher than 40's	50's & 60's significantly higher than 30's & 40's	50's & 60's significantly higher than 30's & 40's

Appendix A 40-Item Forced-Choice Instrument

		1	2	3	4	5
1	a. I suggest logical solutions to problems.					
	b. I put forward my ideas even when they are unpopular.					
2	a. I challenge ideas or suggestions with which I disagree.					
	b. I get others to support my ideas by offering to help them in some way.					
3	 a. I will bargain to reach agreement when something is important to me. 					_
3	b. I work hard to establish a climate of trust.					
4	a. I listen carefully to what others have to say.				_	
	b. I communicate my vision for the best outcome.				Ш	
5	a. I present rational arguments.					
	b. I will make concessions to get something that is really important to me.			Ш		
6	a. I want to make sure my position is heard.					
-	b. I acknowledge the needs and concerns of the other party.					
7	a. I make tradeoffs in order to get things accomplished.				_	
	b. I help others see the exciting possibilities in a situation.				Ш	
8	a. I use rational arguments to support my position.					_
0	b. I show appreciation for other people's issues and needs.					
9	I let people know exactly where I stand.				_	
	b. I appeal to people's hopes and dreams to gain their support.	_			Ш	
10	a. I organize my presentations using solid logic.				_	
10	b. I am enthusiastic when presenting my ideas.				Ш	
11	 a. I challenge ideas or suggestions with which I disagree. 	_				
	b. I present rational arguments.	Ш				
12	I will bargain to reach agreement when something is important to me.					
12	b. I want to make sure my position is heard.					
13	I make tradeoffs in order to get things accomplished. I help others see the exciting possibilities in a situation. I use rational arguments to support my position. I show appreciation for other people's issues and needs. I let people know exactly where I stand. I appeal to people's hopes and dreams to gain their support. I organize my presentations using solid logic. I am enthusiastic when presenting my ideas. I challenge ideas or suggestions with which I disagree. I present rational arguments. I will bargain to reach agreement when something is important to me. I want to make sure my position is heard. I listen carefully to what others have to say. I make tradeoffs in order to get things accomplished. I am enthusiastic when presenting my ideas. I show appreciation for other people's issues and needs. I get others to support my ideas by offering to help them in some way. I use rational arguments to support my position. I work hard to establish a climate of trust.					
15	b. I make tradeoffs in order to get things accomplished.			Ш	_	
14	a. I am enthusiastic when presenting my ideas.					
14	b. I show appreciation for other people's issues and needs.					
15	 a. I get others to support my ideas by offering to help them in some way. 			Ш		
10	b. I use rational arguments to support my position.			_		
16	a. I work hard to establish a climate of trust.					
10	b. I let people know exactly where I stand.					
		1	2	3	4	5

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		1	2	3	4	5
47	a. I communicate my vision for the best outcome.					
17	b. I will make concessions to get something that is really important to me.					
10	a. I acknowledge the needs and concerns of the other party.					
18	b. I organize my presentations using solid logic.					
10	a. I help others see the exciting possibilities in a situation.					
19	b. I put forward my ideas even when they are unpopular.					
20	a. I appeal to people's hopes and dreams to gain their support.					
20	b. I suggest logical solutions to problems.					
21	a. I use rational arguments to support my position.					
21	b. I want to make sure my position is heard.					
22	a. I let people know exactly where I stand.					
22	b. I make tradeoffs in order to get things accomplished.					
22	a. I will make concessions to get something that is really important to me.					
23	 I show appreciation for other people's issues and needs. 					
24	a. I acknowledge the needs and concerns of the other party.					
24	b. I appeal to people's hopes and dream to gain their support.					
25	a. I organize my presentations using solid logic.	tant to me.				
25	b. I will bargain to reach agreement when something is important to me.					
26	I appeal to people's hopes and dream to gain their support. I organize my presentations using solid logic. I will bargain to reach agreement when something is important to me. I put forward my ideas even when they are unpopular. I listen carefully to what others have to say. I get others to support my ideas by offering to help them in some way.					
26	b. I listen carefully to what others have to say.					
27	a. I get others to support my ideas by offering to help them in some way.					
27	b. I am enthusiastic when presenting my ideas.					
20	a. I suggest logical solutions to problems.					
28	b. I work hard to establish a climate of trust.					
29	a. I challenge ideas or suggestions with which I disagree.					
29	I put forward my ideas even when they are unpopular. I listen carefully to what others have to say. I get others to support my ideas by offering to help them in some way. I am enthusiastic when presenting my ideas. I suggest logical solutions to problems. I work hard to establish a climate of trust. I challenge ideas or suggestions with which I disagree. I communicate my vision for the best outcome. I present rational arguments. I help others see the exciting possibilities in a situation.					
20	a. I present rational arguments.					
30	b. I help others see the exciting possibilities in a situation.					
21	a. I let people know exactly where I stand.					
31	b. I organize my presentations using solid logic.					
22	a. I will make concessions to get something that is really important to me.					
32	b. I put forward my ideas even when they are unpopular.					
33	a. I acknowledge the needs and concerns of the other party.					
33	b. I get others to support my ideas by offering to help them in some way.					
		1	2	3	4	5

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		1	2	3	4	5
34	a. I help others see the exciting possibilities in a situation.					
	b. I work hard to establish a climate of trust.					
35	a. I make tradeoffs in order to get things accomplished.					
	b. I suggest logical solutions to problems.					
36	a. I show appreciation for other people's issues and needs.					
	b. I challenge ideas or suggestions with which I disagree.					
37	a. I appeal to people's hopes and dreams to gain their support.					
	b. I will bargain to reach agreement when something is important to me.					
38	a. I listen carefully to what others have to say.					
	b. I present rational arguments.					
39	a. I am enthusiastic when presenting my ideas.					
	b. I want to make sure my position is heard.					
40	a. I communicate my vision for the best outcome.					
	b. I use rational arguments to support my position.					
	Step 2: Total the number of "Xs" for each of the five columns (Items 1-40).					
		1	2	3	4	5