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# International Technical Brief for the CPI 260<sup>®</sup> ASSESSMENT

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# INTRODUCTION

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The *California Psychological Inventory*<sup>™</sup> (CPI<sup>™</sup>) assessment has a long history of use, with over 50 years of extensive empirical research (Gough & Bradley, 2005). The CPI 260<sup>®</sup> assessment is the most recent version of the CPI assessment to be commercially available. It is meant “to give a true-to-life description of the respondent, in clear, everyday language, in formats that can help the client to achieve a better understanding of self” (Gough & Bradley, 2005, p. 1). Those interested in CPI assessments for use in the United States are encouraged to review the respective manuals and support documents (Devine, 2005; Gough & Bradley, 1996/2002, 2005; Manoogian, 2002/2005, 2006; McAllister, 1996; Megargee, 1972; Meyer & Davis, 1992).

This technical brief provides an overview of the translation and adaptation process for the CPI 260 assessment into the following nine languages:

- Danish
- Dutch
- European Spanish
- French
- German
- Swedish
- Simplified Chinese
- Traditional Chinese
- Latin American Spanish

Detailed in this brief are the psychometric properties of the translations or adaptations of the CPI 260 assessment in these nine languages.

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this technical document in order to show patterns of differences. The technical document shows how each of the CPI 260 scales functions psychometrically in each language. The nine samples described here were used to create the standardization formulas for each of the respective languages and are reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the samples and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

This supplement is written to enable ease of use for practitioners who use the CPI 260 tool in different countries and for those who use it in mixed-culture groups, as well as for academics and researchers interested in the measurement properties of the assessment in other cultures. To that end, the analysis results are presented in two ways. First, within the body of the text they are combined in a format that allows for cross-cultural comparison as well as to demonstrate the resilience of the CPI 260 assessment when translated or adapted. Second, they are presented in individual appendixes structured by translated language.

## ADAPTATION PROCESS

CPP follows the International Testing Commission (ITC) guidelines for adaptations of its assessment products (ITC, 2000). For the CPI 260 translations, the process included an initial translation of the assessment content by a professional translation agency, along with an internal review by the agency. Next, in-country experts on the CPI assessment who were also native language speakers reviewed the translation. Differences between the translator and the reviewer were then reconciled. The reconciled adaptations of the assessment were used for the research conducted and reported here. This brief serves to meet the ITC recommendation for documentation.

## DATA COLLECTION PROCESS

Data were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in each language as well as demographic and validity items. The data were collected in two waves. The first wave collected data on the CPI 260 assessment as well as demographic information. The second wave involved a random subset of participants from the first wave, and these participants completed the *Adjective Check List*. The targeted samples were selected to reflect the working population within each culture because employed adults are the primary users of the assessment. No personally identifying information was collected, and respondents were paid for their participation. As a result of the desire to represent employed adults in each of the target cultures, to be included in the individual

**TABLE 1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS BY LANGUAGE SAMPLE**

Invalidity Indicator	Danish		Dutch		European Spanish		French		German		Swedish		Simplified Chinese		Traditional Chinese		Latin American Spanish	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Fake good	5	1.0	8	1.7	11	2.6	5	1.0	9	1.7	1	0.2	5	1.7	9	1.4	18	6.9
Fake bad	4	0.8	5	1.1	17	3.9	18	3.7	13	2.5	12	2.5	43	15.0	111	17.1	7	2.7
Random	2	0.4	3	0.6	12	2.8	8	1.6	6	1.2	6	1.2	14	4.9	70	10.8	5	1.9

Note: Danish *N* = 499, Dutch *N* = 469, European Spanish *N* = 431, French *N* = 490, German *N* = 518, Swedish *N* = 481, Simplified Chinese *N* = 286, Traditional Chinese *N* = 649, Latin American Spanish *N* = 261.

country samples, respondents had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin and country of residence is one in which the language of the research assessment is widely spoken. Respondents with too many omitted items (13 or more) were removed from the samples. In addition, each sample has an approximately equal number of men and women. The rates of invalidity indicators (*fake good*, *fake bad*, and *random*) in each sample are within the normal ranges for most languages. The number and percentage of cases flagged with each validity indicator are shown in Table 1 for each sample.

The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002). The languages that had invalidity indicators outside the normal ranges are Simplified Chinese and Traditional Chinese. Because of the larger percentage of random and fake bad respondents in the two Chinese samples, it is necessary to examine these samples without such cases. Therefore, most of the following analyses include both the Simplified and Traditional Chinese samples, as well as a subsample of each

that does not include any cases flagged with an invalidity indicator.

## SAMPLE DESCRIPTION

The demographic makeup of each sample is described in Table 2. The table shows the number and percentage of individuals by gender, their full- and part-time employment status, their organizational level, whether they are satisfied with their job, and their self-reported industry in which they are employed. Also provided are individuals' average age and average number of years reported working in the current occupation for each sample. The demographic information reported here for the two Chinese samples includes cases flagged with invalidity indicators.

## MEAN SCORES

The CPI 260 assessment comprises three sets of scales. The main focus of the CPI assessment is on the measurement of what Gough (1957, 1987; Gough & Bradley, 1996/2002, 2005) calls *folk concepts*, such as dominance, self-control, and sociability. Folk concepts can be found anywhere people interact. Cross-cultural research has been conducted on the CPI assessment in numerous languages and cultures (Ahmad, 1986; Ahmad, Haque, & Anila, 1994; Albu & Pitariu, 1999; Alfano & Traina, 1972; Armentrout, 1977; Banissoni, 1967; Blane & Yamamoto, 1970; Brengelmann, 1959; Casas, Segura, Camacho, & Mojarro, 1998; Cook, Young, Taylor, O'Shea, Chitashvili, Lepeska, Choumentauskas, Ventskovsky, Hermochova, & Uhler, 1998). CPI manuals or technical documents are available in the following languages: German (Weinert, 1998), Hungarian (Olah, 1985), Mandarin Chi-

**TABLE 2. DEMOGRAPHIC CHARACTERISTICS BY LANGUAGE SAMPLE**

Demographic Characteristic	Danish		Dutch		European Spanish		French		German		Swedish	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>												
Men	248	50	238	51	221	51	242	49	258	50	238	49
Women	249	50	231	49	210	49	247	50	260	50	243	51
<b>Employment Status</b>												
Working full-time	433	87	306	65	375	87	433	88	412	80	377	78
Working part-time	66	13	163	35	56	13	57	12	106	20	104	22
<b>Organizational level</b>												
Entry level	59	12	20	4	33	8	78	16	43	8	23	5
Nonsupervisory	203	41	337	72	190	44	246	50	311	60	291	60
Supervisory	79	16	36	8	127	30	34	7	69	13	115	24
Management	91	18	48	10	38	9	80	16	40	8	33	7
Executive	54	11	17	4	24	6	31	6	19	4	8	2
Top executive	11	2	9	2	17	4	17	3	32	6	10	2
Not provided	2	<1	2	<1	2	<1	4	1	4	1	1	<1
Satisfied with job	487	98	436	94	372	87	414	85	465	91	442	92
<b>Industry</b>												
Agriculture, forestry, and fishing	7	1	1	<1	3	1	8	2	2	<1	5	1
Mining	0	0	0	0	2	<1	1	<1	0	0	0	0
Construction	15	3	12	3	29	7	14	3	19	4	17	4
Manufacturing	57	11	23	5	15	3	44	9	55	11	52	11
Wholesale trade	14	3	17	4	15	3	18	4	17	3	9	2
Retail trade	29	6	33	7	33	8	51	10	47	9	25	5
Finance, insurance, and real estate	18	4	24	4	19	4	27	6	32	6	14	3
Professional, scientific, and technical services	28	6	42	9	67	16	34	7	25	5	52	11
Personal care and other services	88	18	121	26	16	4	63	13	56	11	76	16
Transportation, electric, gas, and sanitary services	36	7	24	5	27	6	21	4	22	4	19	4
Information systems and technology	34	7	16	3	36	8	9	2	22	4	26	5
Information, media, and communications	26	5	14	3	22	5	13	3	24	5	35	7
Other	146	29	144	31	145	34	186	38	195	38	149	31
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
Age	45.6	11.0	45.0	11.1	38.8	9.6	10.7	11.3	43.2	10.9	43.1	10.6
Years working in current occupation	14.7	11.7	13.0	11.0	12.9	10.4	12.8	11.0	11.8	10.1	12.5	10.8

(cont'd)

nese (Yang & Gong, 1993), Polish (Kottas & Markowska, 1966), Romanian (Pitariu, 1995), Russian (Tarabrina & Grafina, 1998), Spanish (Gough & Seisedos, 1992), Urdu (Ahmad, 1986), and U.K. English (OPP, 2005). The CPI 260 assessment also contains three vector scales assessing

individuals' orientations toward the interpersonal world, societal values, and the self (Gough & Bradley, 2005). The final group is special purpose scales that typically measure various work-related dispositions.

**TABLE 2. DEMOGRAPHIC CHARACTERISTICS BY LANGUAGE SAMPLE *CONT'D***

Demographic Characteristic	Simplified Chinese		Traditional Chinese		Simplified Chinese (subsample)		Traditional Chinese (subsample)		Latin American Spanish	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>										
Men	146	51	308	47	107	48	210	46	110	42
Women	140	49	341	53	118	52	249	54	151	58
<b>Employment Status</b>										
Working full-time	268	94	598	92	210	93	421	92	178	68
Working part-time	18	6	51	8	15	7	38	8	83	32
<b>Organizational level</b>										
Entry level	20	7	96	15	15	7	63	14	24	9
Nonsupervisory	110	38	244	38	92	41	187	41	65	25
Supervisory	83	29	151	23	66	29	99	22	58	22
Management	42	15	94	14	29	13	63	14	46	18
Executive	25	9	41	6	20	9	27	6	41	16
Top executive	6	2	22	3	3	1	19	4	24	9
Not provided	0	0	1	<1	0	0	1	<1	3	1
Satisfied with job	235	82	524	81	185	82	373	81	234	90
<b>Industry</b>										
Agriculture, forestry, and fishing	3	1	5	1	2	1	3	1	3	1
Mining	0	0	3	<1	0	0	2	<1	0	0
Construction	17	6	41	6	11	5	32	7	19	7
Manufacturing	56	20	81	12	42	19	56	12	13	5
Wholesale trade	16	6	43	7	12	5	28	6	15	6
Retail trade	17	6	65	10	14	6	43	9	30	11
Finance, insurance, and real estate	16	6	55	8	13	6	43	9	19	7
Professional, scientific, and technical services	28	10	70	11	24	11	53	12	50	19
Personal care and other services	6	2	33	5	5	2	23	5	5	2
Transportation, electric, gas, and sanitary services	22	8	26	4	20	9	16	3	6	2
Information systems and technology	22	8	42	6	14	6	31	7	19	7
Information, media, and communications	22	8	44	7	21	9	30	7	16	6
Other	59	21	141	22	46	20	99	22	64	25
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
Age	29.5	7.1	30.6	7.3	29.9	7.2	31.1	7.6	34.6	10.5
Years working in current occupation	6.3	6.1	7.2	6.2	6.3	6.0	7.2	6.4	8.7	7.9

Note: Danish *N* = 499, Dutch *N* = 469, European Spanish *N* = 431, French *N* = 490, German *N* = 518, Swedish *N* = 481, Simplified Chinese *N* = 286, Traditional Chinese *N* = 649, Simplified Chinese (subsample) *n* = 225, Traditional Chinese (subsample) *n* = 459, Latin American Spanish *N* = 261. Not all respondents provided answers to all the demographic items.

**TABLE 3. U.S. CPI 260® SCALE RAW SCORE MEANS AND STANDARD DEVIATIONS BY LANGUAGE SAMPLE**

CPI 260® Scale	Danish		Dutch		European Spanish		French		German		Swedish	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	18.93	6.74	19.35	6.27	18.24	6.46	17.29	6.56	17.95	6.50	19.83	6.89
Capacity for Status (Cs)	13.53	4.20	12.04	4.38	13.30	4.10	11.69	4.23	11.20	3.84	13.77	4.34
Sociability (Sy)	14.59	4.19	13.84	4.25	14.05	4.47	13.21	4.26	13.27	4.10	14.29	4.25
Social Presence (Sp)	17.63	4.41	17.42	3.99	17.34	3.89	16.29	4.13	16.32	3.96	18.48	4.24
Self-acceptance (Sa)	13.36	4.02	12.77	3.70	12.84	3.60	11.61	3.85	12.34	3.96	13.67	4.21
Independence (In)	14.36	4.12	14.31	3.96	13.45	3.97	12.20	4.28	13.24	4.25	14.36	4.38
Empathy (Em)	14.07	3.26	13.07	3.36	13.59	3.34	12.84	3.44	11.90	3.26	13.37	3.37
Responsibility (Re)	16.00	3.28	15.21	3.15	15.31	3.29	14.40	3.17	14.15	3.35	14.88	3.36
Social Conformity (So)	20.22	3.86	20.20	3.63	20.02	4.33	19.24	4.32	18.27	4.37	19.33	3.93
Self-control (Sc)	16.49	4.64	17.68	4.11	14.92	4.30	16.91	4.54	16.59	4.99	14.54	4.71
Good Impression (Gi)	14.90	4.02	15.33	3.94	13.66	4.24	13.81	4.18	14.33	4.49	12.34	4.24
Communality (Cm)	18.68	1.92	18.56	1.84	18.09	2.56	17.45	2.15	18.64	2.30	17.96	2.18
Well-being (Wb)	15.07	3.62	15.43	3.59	13.21	3.58	12.87	3.71	13.76	3.97	13.79	3.81
Tolerance (To)	13.05	3.72	11.46	3.64	10.56	3.84	9.91	3.39	9.70	3.34	11.87	3.76
Achievement via Conformance (Ac)	18.95	3.65	19.12	3.77	19.60	4.24	18.33	3.88	18.48	4.20	18.35	3.79
Achievement via Independence (Ai)	15.46	3.83	14.30	3.90	13.91	3.69	12.83	3.59	12.79	3.49	14.51	3.90
Conceptual Fluency (Cf)	19.64	4.40	18.68	4.45	18.00	4.31	17.33	4.47	18.14	4.59	18.70	4.53
Insightfulness (Is)	13.34	2.91	12.39	2.70	12.12	3.14	11.56	2.80	12.39	2.95	12.23	2.93
Flexibility (Fx)	9.55	3.66	9.67	3.51	7.87	3.58	8.70	3.54	7.90	3.23	9.25	3.92
Sensitivity (Sn)	12.71	3.12	13.25	3.53	11.50	2.79	12.75	3.40	13.04	3.40	12.99	3.57
Managerial Potential (Mp)	16.12	4.27	14.68	4.15	13.13	3.91	12.76	3.88	12.27	3.76	14.74	3.97
Work Orientation (Wo)	16.46	3.27	16.28	3.49	14.67	3.64	14.13	3.47	14.72	3.50	15.65	3.39
Creative Temperament (Ct)	15.27	4.20	14.63	4.25	14.38	3.93	14.11	4.11	14.02	3.68	14.90	4.26
Leadership (Lp)	24.32	6.46	23.86	6.10	22.89	6.71	21.58	6.58	22.10	6.67	23.62	6.55
Amicability (Ami)	19.18	4.36	18.56	4.47	16.32	4.39	16.42	4.36	15.88	4.49	17.38	4.44
Law Enforcement Orientation (Leo)	17.81	2.96	18.30	2.89	16.80	3.20	16.87	3.05	17.78	3.17	17.09	2.90
vector 1 (v.1)	11.04	4.58	11.86	3.99	10.26	4.25	11.83	4.28	12.39	4.47	9.65	4.62
vector 2 (v.2)	12.67	3.02	12.28	3.12	13.36	3.10	12.11	3.03	11.96	3.34	12.15	3.01
vector 3 (v.3)	17.87	5.67	17.23	5.29	14.28	5.54	14.38	5.19	14.53	5.01	16.99	5.62

(cont'd)

The U.S. CPI 260 scale raw score means and standard deviations for the nine languages being examined are presented in Table 3, along with those from the CPI 260 U.S. normative sample for comparison purposes (Gough & Bradley, 2005). Table 4 presents the standardized scale score means and standard deviations for each sample. It is risky to make inferences from apparent differences (Gough & Bradley, 2005) across

countries or cultures like those shown in Table 3 or Table 4. The U.S. normative sample mean for each standardized scale is 50, and the standard deviation is 10; therefore the sample was not included in Table 4. Tables 3 and 4 also include the raw and standard score means for the Simplified and Traditional Chinese subsamples (i.e., those with invalidity indicators removed).

**TABLE 3. U.S. CPI 260® SCALE RAW SCORE MEANS AND STANDARD DEVIATIONS  
BY LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale	Simplified Chinese		Traditional Chinese		Simplified Chinese (subsample)		Traditional Chinese (subsample)		Latin American Spanish		U.S. English (normative)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	18.05	5.86	16.50	6.10	18.46	6.01	16.78	6.52	22.76	5.98	16.80	6.53
Capacity for Status (Cs)	12.68	3.66	12.15	3.66	12.78	3.79	12.23	3.81	15.96	3.98	13.15	4.52
Sociability (Sy)	13.87	4.13	12.33	4.39	14.19	4.15	12.62	4.59	16.53	3.74	13.72	4.44
Social Presence (Sp)	17.13	3.59	15.69	3.51	17.49	3.66	16.24	3.55	19.04	3.36	17.83	4.09
Self-acceptance (Sa)	12.63	3.47	11.68	3.57	12.91	3.49	11.84	3.75	15.48	3.18	12.55	3.91
Independence (In)	12.59	4.02	11.33	3.76	13.32	3.78	11.84	3.70	15.70	3.40	12.08	4.16
Empathy (Em)	12.75	2.79	12.00	2.94	12.68	2.81	11.89	2.99	14.82	2.98	11.60	3.68
Responsibility (Re)	13.91	2.93	12.78	3.07	14.55	2.65	13.49	2.82	16.24	3.10	15.65	3.90
Social Conformity (So)	17.85	4.28	17.30	4.38	18.80	3.89	18.28	4.05	20.45	4.13	20.44	4.40
Self-control (Sc)	12.58	3.95	14.05	4.47	13.04	3.71	14.70	4.25	14.03	4.55	13.96	5.04
Good Impression (Gi)	12.64	3.82	12.93	3.96	12.90	3.61	13.18	3.84	13.79	4.57	12.10	4.71
Communality (Cm)	16.52	2.82	15.31	3.11	17.58	1.96	16.81	1.94	18.17	2.25	19.21	2.13
Well-being (Wb)	11.78	3.57	11.06	3.51	12.66	3.18	11.92	3.29	14.85	3.59	15.12	3.50
Tolerance (To)	8.78	3.63	9.23	3.69	9.32	3.34	9.62	3.48	11.57	3.72	11.19	4.13
Achievement via Conformance (Ac)	18.44	3.89	17.93	4.25	19.33	3.19	19.00	3.82	21.00	4.00	19.34	4.70
Achievement via Independence (Ai)	11.93	3.56	11.19	3.44	12.60	3.27	11.62	3.14	14.29	3.44	13.43	4.72
Conceptual Fluency (Cf)	17.42	4.24	16.26	4.15	18.26	3.93	17.07	3.92	19.69	4.15	19.02	5.06
Insightfulness (Is)	11.60	2.88	11.12	2.82	12.10	2.70	11.61	2.64	12.86	2.82	12.28	3.44
Flexibility (Fx)	6.24	2.80	7.26	3.34	6.31	2.73	7.16	3.23	7.12	3.04	9.44	3.69
Sensitivity (Sn)	13.08	2.91	13.43	2.95	13.04	2.99	13.42	3.09	11.73	2.97	14.40	3.58
Managerial Potential (Mp)	11.90	3.80	11.80	3.75	12.26	3.80	11.98	3.74	14.77	4.13	12.69	4.65
Work Orientation (Wo)	13.31	3.65	13.24	3.72	14.16	3.24	14.16	3.38	15.34	3.51	16.07	3.65
Creative Temperament (Ct)	12.41	3.49	12.49	3.80	12.87	3.26	12.69	3.66	16.17	3.44	14.74	4.12
Leadership (Lp)	21.77	6.03	19.90	6.22	22.72	5.91	20.77	6.35	27.04	6.19	22.33	6.54
Amicability (Ami)	15.04	4.28	14.56	4.46	15.80	3.97	15.33	4.28	16.77	4.36	17.54	4.60
Law Enforcement Orientation (Leo)	16.33	2.91	15.83	3.03	16.89	2.52	16.33	2.85	17.50	2.93	16.21	3.19
vector 1 (v.1)	8.36	4.19	10.29	4.72	8.87	4.08	10.91	4.64	7.41	3.71	11.96	4.35
vector 2 (v.2)	14.24	3.14	12.35	3.77	14.21	3.06	12.45	3.69	14.10	2.94	12.48	3.64
vector 3 (v.3)	10.46	4.63	11.72	5.30	10.92	4.28	11.83	4.85	14.59	5.46	15.35	6.00

Note: Danish  $N = 499$ , Dutch  $N = 469$ , European Spanish  $N = 431$ , French  $N = 490$ , German  $N = 518$ , Swedish  $N = 481$ , Simplified Chinese  $N = 286$ , Traditional Chinese  $N = 649$ , Simplified Chinese (subsample)  $n = 225$ , Traditional Chinese (subsample)  $n = 459$ , Latin American Spanish  $N = 261$ , U.S. English (normative)  $N = 6,000$ . Source for the U.S. normative sample means and standard deviations is the *CPI 260® Manual* (Gough & Bradley, 2005).

**TABLE 4. U.S. CPI 260® SCALE STANDARD SCORE MEANS AND STANDARD DEVIATIONS BY LANGUAGE SAMPLE**

CPI 260® Scale	Danish		Dutch		European Spanish		French		German		Swedish	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	53.26	10.31	53.90	9.59	52.20	9.89	50.74	10.04	51.76	9.95	54.63	10.55
Capacity for Status (Cs)	50.83	9.28	47.55	9.68	50.33	9.06	46.77	9.35	45.70	8.49	51.36	9.60
Sociability (Sy)	51.95	9.42	50.27	9.56	50.73	10.06	48.86	9.60	48.98	9.22	51.28	9.56
Social Presence (Sp)	49.51	10.77	49.00	9.74	48.81	9.49	46.23	10.08	46.31	9.67	51.58	10.34
Self-acceptance (Sa)	52.07	10.30	50.57	9.46	50.75	9.22	47.59	9.86	49.47	10.15	52.86	10.78
Independence (In)	55.48	9.88	55.36	9.50	53.30	9.52	50.29	10.28	52.78	10.20	55.47	10.51
Empathy (Em)	56.72	8.86	53.99	9.14	55.41	9.09	53.38	9.36	50.81	8.88	54.82	9.16
Responsibility (Re)	50.90	8.40	48.88	8.08	49.14	8.42	46.80	8.11	46.16	8.59	48.03	8.61
Social Conformity (So)	49.50	8.76	49.45	8.25	49.04	9.84	47.28	9.80	45.07	9.91	47.49	8.91
Self-control (Sc)	55.02	9.18	57.36	8.13	51.90	8.51	55.85	8.98	55.21	9.88	51.15	9.33
Good Impression (Gi)	55.94	8.51	56.84	8.34	53.31	8.99	53.63	8.86	54.72	9.52	50.51	8.98
Communality (Cm)	47.53	9.02	46.94	8.64	44.74	12.00	41.76	10.09	47.31	10.78	44.16	10.22
Well-being (Wb)	49.85	10.36	50.88	10.26	44.54	10.25	43.57	10.60	46.11	11.36	46.20	10.89
Tolerance (To)	54.51	9.01	50.65	8.80	48.47	9.30	46.91	8.19	46.41	8.07	51.65	9.09
Achievement via Conformance (Ac)	49.16	7.78	49.53	8.04	50.54	9.03	47.85	8.27	48.17	8.95	47.89	8.07
Achievement via Independence (Ai)	54.31	8.11	51.85	8.27	51.03	7.81	48.72	7.60	48.65	7.41	52.30	8.26
Conceptual Fluency (Cf)	51.23	8.70	49.34	8.81	47.98	8.53	46.66	8.86	48.25	9.09	49.37	8.97
Insightfulness (Is)	53.10	8.48	50.33	7.84	49.52	9.15	47.89	8.16	50.31	8.60	49.86	8.53
Flexibility (Fx)	50.30	9.92	50.61	9.52	45.75	9.70	47.99	9.60	45.83	8.74	49.49	10.61
Sensitivity (Sn)	45.77	7.79	47.13	8.83	47.29	7.35	45.88	8.50	46.60	8.50	46.48	8.92
Managerial Potential (Mp)	57.38	9.17	54.28	8.93	50.95	8.41	50.15	8.33	49.11	8.08	54.42	8.54
Work Orientation (Wo)	51.08	8.95	50.59	9.55	46.17	9.96	44.68	9.51	46.29	9.60	48.85	9.30
Creative Temperament (Ct)	51.29	10.20	49.74	10.33	49.13	9.54	48.47	9.98	48.25	8.95	50.38	10.36
Leadership (Lp)	53.05	9.88	52.35	9.33	50.86	10.27	48.85	10.07	49.65	10.21	51.98	10.02
Amicability (Ami)	53.55	9.46	52.21	9.70	47.36	9.52	47.58	9.46	46.40	9.75	49.66	9.64
Law Enforcement Orientation (Leo)	55.02	9.25	56.54	9.04	51.84	10.01	52.05	9.53	54.91	9.91	52.76	9.09
vector 1 (v.1)	47.88	10.54	49.78	9.19	46.09	9.77	49.70	9.84	51.00	10.28	44.68	10.63
vector 2 (v.2)	50.52	8.31	49.44	8.58	52.41	8.51	48.99	8.32	48.56	9.18	49.08	8.29
vector 3 (v.3)	54.20	9.47	53.15	8.83	48.21	9.25	48.38	8.67	48.63	8.36	52.74	9.39

(cont'd)

**TABLE 4. U.S. CPI 260® SCALE STANDARD SCORE MEANS AND STANDARD DEVIATIONS  
BY LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale	Simplified Chinese		Traditional Chinese		Simplified Chinese (subsample)		Traditional Chinese (subsample)		Latin American Spanish	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	51.92	8.96	49.54	9.33	52.54	9.19	49.96	9.98	59.12	9.14
Capacity for Status (Cs)	48.97	8.08	47.80	8.08	49.18	8.38	47.97	8.41	56.21	8.80
Sociability (Sy)	50.33	9.29	46.86	9.87	51.05	9.35	47.53	10.33	56.32	8.41
Social Presence (Sp)	48.29	8.77	44.78	8.56	49.18	8.93	46.11	8.66	52.95	8.21
Self-acceptance (Sa)	50.21	8.89	47.78	9.14	50.91	8.93	48.18	9.61	57.51	8.15
Independence (In)	51.23	9.65	48.21	9.01	52.98	9.06	49.42	8.88	58.68	8.15
Empathy (Em)	53.12	7.60	51.08	7.99	52.93	7.64	50.78	8.14	58.76	8.09
Responsibility (Re)	45.54	7.50	42.66	7.86	47.18	6.77	44.48	7.22	51.51	7.92
Social Conformity (So)	44.13	9.71	42.87	9.95	46.28	8.82	45.10	9.20	50.02	9.37
Self-control (Sc)	47.28	7.82	50.18	8.85	48.18	7.35	51.47	8.42	50.14	9.00
Good Impression (Gi)	51.15	8.11	51.76	8.39	51.70	7.65	52.28	8.14	53.57	9.68
Communality (Cm)	37.39	13.21	31.71	14.60	42.37	9.20	38.74	9.09	45.12	10.55
Well-being (Wb)	40.45	10.22	38.38	10.05	42.97	9.09	40.85	9.41	49.22	10.27
Tolerance (To)	44.16	8.79	45.26	8.93	45.49	8.08	46.19	8.41	50.93	9.01
Achievement via Conformance (Ac)	48.09	8.30	47.00	9.05	49.99	6.80	49.27	8.13	53.53	8.51
Achievement via Independence (Ai)	46.83	7.54	45.24	7.30	48.23	6.93	46.17	6.66	51.83	7.29
Conceptual Fluency (Cf)	46.84	8.40	44.53	8.22	48.50	7.77	46.15	7.76	51.32	8.22
Insightfulness (Is)	48.04	8.39	46.62	8.22	49.48	7.87	48.06	7.67	51.68	8.19
Flexibility (Fx)	41.33	7.60	44.08	9.05	41.52	7.40	43.82	8.75	43.72	8.25
Sensitivity (Sn)	46.69	7.29	47.59	7.37	46.59	7.47	47.56	7.73	43.32	7.43
Managerial Potential (Mp)	48.31	8.16	48.08	8.06	49.07	8.17	48.47	8.03	54.48	8.88
Work Orientation (Wo)	42.44	10.01	42.23	10.18	44.75	8.88	44.77	9.27	47.99	9.60
Creative Temperament (Ct)	44.34	8.49	44.54	9.23	45.46	7.92	45.01	8.89	53.47	8.35
Leadership (Lp)	49.14	9.23	46.27	9.52	50.59	9.05	47.62	9.71	57.21	9.47
Amicability (Ami)	44.57	9.28	43.53	9.69	46.21	8.62	45.20	9.28	48.34	9.46
Law Enforcement Orientation (Leo)	50.38	9.09	48.80	9.50	52.12	7.88	50.38	8.92	54.03	9.18
vector 1 (v.1)	41.71	9.64	46.15	10.85	42.89	9.37	47.58	10.68	39.53	8.52
vector 2 (v.2)	54.83	8.63	49.63	10.37	54.77	8.43	49.93	10.14	54.45	8.07
vector 3 (v.3)	41.84	7.73	43.94	8.85	42.60	7.15	44.13	8.10	48.73	9.11

Note: Danish  $N = 499$ , Dutch  $N = 469$ , European Spanish  $N = 431$ , French  $N = 490$ , German  $N = 518$ , Swedish  $N = 481$ , Simplified Chinese  $N = 286$ , Traditional Chinese  $N = 649$ , Simplified Chinese (subsample)  $n = 225$ , Traditional Chinese (subsample)  $n = 459$ , Latin American Spanish  $N = 261$ .

**TABLE 5. U.S. CPI 260® SCALE STANDARD SCORE MEANS BY GENDER FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale	Danish		Dutch		European Spanish		French		German		Swedish	
	Women (n = 249)	Men (n = 248)	Women (n = 231)	Men (n = 238)	Women (n = 210)	Men (n = 221)	Women (n = 247)	Men (n = 242)	Women (n = 260)	Men (n = 258)	Women (n = 243)	Men (n = 238)
Dominance (Do)	53.06	53.52	52.78	54.99	51.91	52.46	49.48	52.10	50.25	53.28	53.92	55.35
Capacity for Status (Cs)	50.89	50.77	46.85	48.23	50.50	50.16	46.06	47.56	44.60	46.80	51.37	51.36
Sociability (Sy)	52.77	51.12	50.15	50.39	51.24	50.26	48.69	49.07	48.78	49.18	52.00	50.54
Social Presence (Sp)	49.65	49.45	48.26	49.73	49.41	48.23	45.28	47.30	45.22	47.41	51.51	51.65
Self-acceptance (Sa)	52.03	52.15	49.26	51.84	50.81	50.70	46.15	49.09	48.32	50.63	52.28	53.44
Independence (In)	54.74	56.27	53.88	56.80	52.99	53.59	48.80	51.89	51.21	54.37	54.15	56.82
Empathy (Em)	57.46	56.01	53.54	54.43	55.46	55.37	52.60	54.24	50.06	51.56	54.90	54.73
Responsibility (Re)	50.76	51.05	49.59	48.20	49.65	48.65	47.56	46.05	45.42	46.91	48.00	48.07
Social Conformity (So)	49.37	49.66	50.33	48.59	49.26	48.83	47.65	46.93	44.97	45.18	47.49	47.48
Self-control (Sc)	54.31	55.71	58.98	55.78	51.15	52.62	56.59	55.06	56.05	54.36	51.13	51.18
Good Impression (Gi)	55.30	56.57	58.13	55.60	53.02	53.58	53.84	53.39	54.86	54.58	50.18	50.84
Communality (Cm)	48.17	46.90	48.55	45.37	45.15	44.36	42.22	41.28	47.77	46.85	44.81	43.50
Well-being (Wb)	49.30	50.44	51.12	50.64	44.38	44.70	43.02	44.20	45.12	47.10	45.89	46.52
Tolerance (To)	55.36	53.71	51.52	49.81	48.87	48.09	47.18	46.65	46.03	46.78	51.88	51.42
Achievement via Conformance (Ac)	49.52	48.82	50.43	48.65	50.94	50.17	48.37	47.33	48.06	48.27	48.19	47.58
Achievement via Independence (Ai)	54.79	53.85	52.15	51.56	51.45	50.62	48.11	49.40	47.70	49.61	52.21	52.38
Conceptual Fluency (Cf)	51.16	51.36	48.92	49.74	47.90	48.07	46.45	46.95	47.14	49.38	49.20	49.54
Insightfulness (Is)	52.97	53.29	50.04	50.62	50.26	48.82	47.36	48.46	49.07	51.55	49.51	50.21
Flexibility (Fx)	50.63	49.99	50.49	50.73	47.64	43.94	48.23	47.80	45.35	46.32	49.29	49.71
Sensitivity (Sn)	48.05	43.38	51.07	43.31	50.27	44.45	48.22	43.45	49.51	43.67	49.79	43.10
Managerial Potential (Mp)	57.62	57.18	54.14	54.42	50.57	51.31	49.32	51.04	47.94	50.28	54.06	54.78
Work Orientation (Wo)	50.71	51.47	51.01	50.18	45.87	46.47	44.21	45.20	44.71	47.89	48.89	48.81
Creative Temperament (Ct)	51.63	50.99	48.61	50.83	49.48	48.80	47.81	49.22	46.93	49.59	50.08	50.69
Leadership (Lp)	52.84	53.29	51.75	52.93	50.61	51.11	47.76	49.99	48.28	51.03	51.86	52.10
Amicability (Ami)	53.01	54.10	53.60	50.85	47.18	47.53	47.35	47.82	46.00	46.80	49.74	49.58
Law Enforcement Orientation (Leo)	53.99	56.13	56.50	56.58	51.36	52.30	51.55	52.55	55.06	54.77	52.56	52.96
vector 1 (v.1)	47.97	47.76	51.61	48.00	46.44	45.75	51.18	48.12	52.52	49.46	45.36	43.98
vector 2 (v.2)	49.91	51.11	49.61	49.27	51.20	53.56	48.05	49.98	47.57	49.56	49.16	49.00
vector 3 (v.3)	55.22	53.26	54.35	51.98	48.70	47.74	48.69	48.10	48.22	49.05	52.93	52.54

(cont'd)

Mean U.S. standard scores for men and women in each language are shown in Table 5. The means for the U.S. normative sample are also included for comparison (Gough & Bradley, 2005). However, the standard deviations are not

included in this table because the *CPI 260® Manual* does not include the standard deviations for men and women. No inferences should be made from apparent differences between mean scores across the samples in this table.

**TABLE 5. U.S. CPI 260® SCALE STANDARD SCORE MEANS BY GENDER FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale	Simplified Chinese		Traditional Chinese		Simplified Chinese (subsample)		Traditional Chinese (subsample)		Latin American Spanish		U.S. English (normative)	
	Women (n = 140)	Men (n = 146)	Women (n = 341)	Men (n = 308)	Women (n = 118)	Men (n = 107)	Women (n = 249)	Men (n = 210)	Women (n = 151)	Men (n = 110)	Women (n = 3,000)	Men (n = 3,000)
Dominance (Do)	51.56	52.26	49.20	49.92	51.99	53.14	49.41	50.62	59.91	58.04	49.48	49.48
Capacity for Status (Cs)	48.88	49.05	47.67	47.95	48.94	49.44	47.92	48.03	56.53	55.78	50.51	50.51
Sociability (Sy)	50.42	50.24	46.57	47.19	50.76	51.37	47.12	48.01	56.38	56.23	50.29	50.29
Social Presence (Sp)	48.57	48.02	44.88	44.67	49.22	49.14	46.28	45.91	53.92	51.61	48.73	48.73
Self-acceptance (Sa)	50.07	50.35	47.70	47.86	50.37	51.51	48.17	48.20	58.46	56.20	49.92	49.92
Independence (In)	51.52	50.94	47.72	48.76	52.92	53.04	48.68	50.29	59.14	58.06	48.68	48.68
Empathy (Em)	53.07	53.17	51.06	51.11	52.96	52.89	50.77	50.79	59.37	57.91	50.62	50.62
Responsibility (Re)	45.61	45.48	42.41	42.95	46.90	47.47	44.09	44.95	51.91	50.97	52.10	52.10
Social Conformity (So)	45.37	42.94	43.34	42.35	47.39	45.06	45.38	44.77	49.83	50.28	51.02	51.02
Self-control (Sc)	47.62	46.95	49.77	50.63	48.75	47.54	50.69	52.40	49.63	50.84	50.89	50.89
Good Impression (Gi)	50.74	51.54	51.44	52.11	51.69	51.71	51.71	52.96	52.54	54.99	50.36	50.36
Communality (Cm)	39.47	35.39	32.41	30.94	43.17	41.48	39.15	38.25	46.65	43.00	50.52	50.52
Well-being (Wb)	38.66	38.07	38.66	38.07	43.38	42.52	40.94	40.74	49.28	49.14	49.46	49.46
Tolerance (To)	44.96	43.39	45.15	45.38	46.53	44.34	46.05	46.36	51.62	49.98	51.09	51.09
Achievement via Conformance (Ac)	49.06	47.16	46.71	47.32	50.54	49.38	48.83	49.78	53.87	53.05	51.38	51.38
Achievement via Independence (Ai)	47.27	46.40	44.76	45.78	48.48	47.96	45.38	47.11	51.66	52.06	50.30	50.30
Conceptual Fluency (Cf)	48.09	45.63	44.05	45.06	49.64	47.24	45.56	46.85	51.80	50.66	50.30	50.30
Insightfulness (Is)	48.42	47.67	45.89	47.44	49.78	49.16	47.09	49.20	52.04	51.20	50.00	50.00
Flexibility (Fx)	42.50	40.21	44.01	44.16	42.97	39.92	43.58	44.11	44.25	42.99	49.67	49.67
Sensitivity (Sn)	48.41	45.04	49.53	45.44	48.34	44.65	49.75	44.95	45.47	40.36	55.05	55.05
Managerial Potential (Mp)	48.24	48.37	47.84	48.35	49.34	48.78	47.92	49.13	54.91	53.89	49.98	49.98
Work Orientation (Wo)	44.02	40.93	42.46	41.98	46.12	43.25	44.77	44.77	48.01	47.96	49.92	49.92
Creative Temperament (Ct)	45.37	43.36	44.87	44.17	46.47	44.34	45.13	44.88	54.16	52.53	49.90	49.90
Leadership (Lp)	49.30	48.99	46.08	46.49	50.58	50.60	47.22	48.09	57.63	56.63	49.82	49.82
Amicability (Ami)	44.89	44.27	43.35	43.73	46.66	45.73	44.65	45.85	47.95	48.87	50.28	50.28
Law Enforcement Orientation (Leo)	50.44	50.33	48.91	48.67	52.39	51.83	49.96	50.88	53.59	54.64	48.87	48.87
vector 1 (v.1)	42.93	40.55	46.57	45.69	44.15	41.49	47.81	47.31	38.76	40.58	50.80	50.80
vector 2 (v.2)	54.32	55.33	49.00	50.33	53.99	55.62	49.12	50.88	53.96	55.13	51.37	51.37
vector 3 (v.3)	42.09	41.59	43.85	44.05	43.40	41.72	43.87	44.43	48.90	48.50	50.32	50.32

Note: Source for the U.S. English normative sample standard score means and standard deviations is the *CPI 260® Manual* (Gough & Bradley, 2005).

# MEASUREMENT PROPERTIES

## RELIABILITY

*Reliability* refers to consistency of measurement. A measure is said to be reliable when it produces a consistent, although not necessarily identical, result. Internal consistency reliability measures the consistency across items, or whether they measure the same thing. The most commonly used estimator of

internal consistency reliability is Cronbach's alpha (Cronbach, 1951). Alphas were calculated for each language sample.

The alphas are presented in Table 6, along with those for the U.S. normative sample (Gough & Bradley, 2005) and a U.S. workforce sample (Anderson, 2007) for comparison pur-

**TABLE 6. CPI 260® SCALE ALPHAS BY LANGUAGE SAMPLE**

	Danish	Dutch	European Spanish	French	German	Swedish
Dominance (Do)	.88	.86	.86	.87	.87	.89
Capacity for Status (Cs)	.74	.75	.68	.71	.66	.72
Sociability (Sy)	.77	.76	.79	.77	.75	.78
Social Presence (Sp)	.74	.67	.64	.67	.65	.70
Self-acceptance (Sa)	.74	.68	.64	.71	.71	.74
Independence (In)	.78	.76	.74	.78	.78	.78
Empathy (Em)	.56	.55	.54	.55	.50	.54
Responsibility (Re)	.64	.58	.62	.58	.63	.63
Social Conformity (So)	.65	.59	.72	.70	.68	.64
Self-control (Sc)	.74	.69	.69	.74	.78	.76
Good Impression (Gi)	.69	.68	.74	.70	.74	.71
Communality (Cm)	.41	.24	.59	.40	.52	.45
Well-being (Wb)	.78	.79	.77	.76	.80	.77
Tolerance (To)	.76	.74	.74	.69	.68	.74
Achievement via Conformance (Ac)	.64	.65	.71	.65	.70	.63
Achievement via Independence (Ai)	.73	.69	.66	.63	.62	.70
Conceptual Fluency (Cf)	.73	.73	.72	.71	.72	.72
Insightfulness (Is)	.56	.41	.57	.48	.52	.50
Flexibility (Fx)	.69	.66	.69	.65	.60	.71
Sensitivity (Sn)	.47	.58	.30	.52	.54	.57
Managerial Potential (Mp)	.75	.73	.68	.69	.67	.71
Work Orientation (Wo)	.68	.70	.70	.66	.69	.66
Creative Temperament (Ct)	.70	.70	.66	.67	.59	.68
Leadership (Lp)	.86	.83	.86	.85	.86	.85
Amicability (Ami)	.75	.77	.74	.73	.77	.74
Law Enforcement Orientation (Leo)	.35	.31	.38	.33	.37	.33
vector 1 (v.1)	.84	.79	.79	.80	.83	.85
vector 2 (v.2)	.56	.59	.61	.58	.64	.55
vector 3 (v.3)	.82	.79	.81	.79	.76	.82

(cont'd)

**TABLE 6. CPI 260® SCALE ALPHAS BY LANGUAGE SAMPLE *CONT'D***

	Simplified Chinese	Traditional Chinese	Simplified Chinese (subsample)	Traditional Chinese (subsample)	Latin American Spanish	U.S. English (normative)	U.S. English (workforce)
Dominance (Do)	.82	.83	.84	.86	.86	.86	.85
Capacity for Status (Cs)	.61	.58	.65	.64	.69	.74	.69
Sociability (Sy)	.76	.75	.76	.79	.73	.77	.75
Social Presence (Sp)	.55	.49	.58	.52	.55	.65	.66
Self-acceptance (Sa)	.61	.62	.64	.68	.63	.68	.67
Independence (In)	.74	.66	.72	.68	.71	.75	.70
Empathy (Em)	.38	.41	.40	.47	.46	.60	.54
Responsibility (Re)	.54	.49	.48	.43	.63	.73	.59
Social Conformity (So)	.68	.68	.63	.63	.74	.73	.58
Self-control (Sc)	.66	.71	.62	.68	.74	.77	.73
Good Impression (Gi)	.63	.65	.59	.65	.76	.77	.69
Communality (Cm)	.58	.58	.27	.10	.52	.55	.28
Well-being (Wb)	.72	.68	.66	.65	.80	.76	.69
Tolerance (To)	.72	.70	.67	.68	.73	.78	.71
Achievement via Conformance (Ac)	.65	.66	.51	.62	.72	.76	.61
Achievement via Independence (Ai)	.63	.66	.58	.48	.66	.78	.67
Conceptual Fluency (Cf)	.68	.65	.63	.60	.70	.78	.69
Insightfulness (Is)	.49	.40	.45	.36	.52	.64	.46
Flexibility (Fx)	.51	.62	.51	.61	.58	.68	.72
Sensitivity (Sn)	.33	.33	.41	.42	.38	.54	.57
Managerial Potential (Mp)	.68	.64	.69	.64	.76	.77	.72
Work Orientation (Wo)	.67	.64	.59	.59	.72	.70	.56
Creative Temperament (Ct)	.52	.58	.48	.56	.57	.71	.70
Leadership (Lp)	.82	.81	.82	.82	.87	.85	.83
Amicability (Ami)	.73	.71	.69	.70	.74	.75	.72
Law Enforcement Orientation (Leo)	.35	.31	.16	.25	.37	.36	.40
vector 1 (v.1)	.80	.83	.79	.83	.73	.80	.78
vector 2 (v.2)	.65	.73	.64	.73	.63	.70	.59
vector 3 (v.3)	.74	.80	.71	.77	.80	.83	.80

Note: Danish  $N = 499$ , Dutch  $N = 469$ , European Spanish  $N = 431$ , French  $N = 490$ , German  $N = 518$ , Swedish  $N = 481$ , Simplified Chinese  $N = 286$ , Traditional Chinese  $N = 649$ , Simplified Chinese (subsample)  $n = 225$ , Traditional Chinese (subsample)  $n = 459$ , Latin American Spanish  $N = 261$ , U.S. English (normative)  $N = 6,000$ , U.S. English (workforce)  $N = 5,000$ . Source for the U.S. normative sample is the *CPI 260® Manual* (Gough & Bradley, 2005); source for the U.S. workforce sample is "CPI 260 U.S. Workforce Norms" (Anderson, 2007).

poses. The U.S. workforce sample was selected to mirror the demographic composition of the U.S. working population according to the Bureau of Labor Statistics (BLS, 2006). Most of the alphas for each language sample are acceptable to good, with some lower alphas on the Communality scale, and are very similar to those reported in the *CPI 260® Manual* and found in the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual* should be kept in mind: "In regard to reliability as

assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demonstrated relationships to nontest criteria" (Gough & Bradley, 1996, p. 57). Given this, "moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected" (p. 59).

## VALIDITY

*Validity* refers to the accuracy of the inferences that may be made based on the results of an assessment. An instrument is said to be valid when it measures what it has been designed to measure (Ghiselli, Campbell, & Zedeck, 1981; Murphy & Davidshofer, 2005). Validity can be demonstrated using a number of different approaches. Validity of each translated assessment is shown by examining the measurement properties of the CPI 260 assessment and comparing those to a standard, here the results for the U.S. normative sample. In addition, evidence of validity can be shown by analyses that relate the measure (here scales from the CPI 260 assessment) to other measures and replicating expected patterns of relationships.

One kind of validity is *construct validity*, which shows that an assessment measures a particular theoretical construct. Factor analysis is the most common way of demonstrating construct validity (Thompson & Daniel, 1996). When a measure relates to other measures of similar concepts that it should be related to, and is not related to measures of dissimilar concepts that it should not be related to, evidence of the measure's validity is established. The former set of relationships is typically termed *convergent validity*, and the latter *discriminant validity*. Convergent validity can be demonstrated when a measure is related to other similar measures, observations, or other information that measures the same or a similar concept. In contrast, discriminant can be demonstrated when a measure fails to relate to other measures, observations, or information that it should not be related to. Several analyses of construct, convergent, and discriminant validity are reported for the translations of the CPI 260 assessment. Finally, validity can also be exhibited if an instrument results in similar patterns or profiles of results across the languages or cultures in which it is used. Analyses examining the pattern of the CPI scales across hierarchical organizational levels are reported to also demonstrate the validity of the translations.

## Factor Analysis

Principal components factor analyses with varimax rotation were conducted using the folk scales for each language sample and a subset of commonly reported special purpose scales, following the approach used by Gough and Bradley (2005). Historically, factor analyses of the CPI assessment have found that a four-factor solution provides the best fit to the factor analysis of the CPI assessment's scales. Therefore, the factor analyses limited the results to a four-factor solution. Following prior research for the solution allows for comparisons of the factor structure in the nine language samples and a comparison to the structure found in the U.S. normative sample. The results, presented in Table 7, show similarity across the nine language samples. The table also includes factor structure of the U.S. normative sample from the *CPI 260® Manual* (Gough & Bradley, 2005) for comparison purposes.

The *CPI 260® Manual* describes the four factors in the following way. Factor 1 has large loadings on the scales Do, Sy, Sa, and Lp, which are measures of ascendancy, interpersonal involvement, self-assurance, and leadership potential (Gough & Bradley, 2005). In 1972, Megargee termed this factor *interpersonal effectiveness*. The largest loadings on factor 2 are Sc, Gi, Wo, and Ami, which are measures of self-discipline, work ethic, wish to do the expected, and warmth toward others. Gough and Bradley (2005) suggest the term *dependability* for this factor. Factor 3 has large loadings on Ai, Fx, and Ct, which can be called *originality/creativity*. Factor 4 may be termed *interpersonal sensitivity*, and it is marked by a large loading on Sn and a secondary loading on Re. The *CPI 260® Manual* also reports low negative loadings on this factor for In, Wb, and Leo (Gough & Bradley, 2005). All of these patterns in the four factors hold up across the nine language samples and two subsamples, with one small exception. There is some divergence in these samples on the low negative loadings of factor 4. Most of the languages show positive correlations rather than low negative loadings for In, Wb, and Leo.

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE**

	Factor 1					
	Danish	Dutch	European Spanish	French	German	Swedish
Dominance (Do)	.89	.93	.93	.93	.92	.90
Capacity for Status (Cs)	.65	.71	.80	.80	.74	.68
Sociability (Sy)	.77	.76	.79	.77	.75	.78
Social Presence (Sp)	.72	.70	.76	.81	.79	.76
Self-acceptance (Sa)	.84	.89	.87	.90	.91	.85
Independence (In)	.79	.81	.75	.83	.79	.82
Empathy (Em)	.47	.57	.72	.71	.60	.54
Responsibility (Re)	.12	.16	.26	.09	.17	.16
Social Conformity (So)	.13	.04	.19	.17	.07	.13
Self-control (Sc)	-.39	-.25	-.16	-.32	-.33	-.38
Good Impression (Gi)	-.02	.01	.14	-.05	-.07	-.10
Communality (Cm)	.17	.03	.07	.12	.31	.15
Well-being (Wb)	.50	.48	.43	.44	.47	.51
Tolerance (To)	.24	.19	.24	.21	.10	.16
Achievement via Conformance (Ac)	.20	.30	.41	.34	.34	.37
Achievement via Independence (Ai)	.26	.26	.47	.44	.31	.34
Conceptual Fluency (Cf)	.49	.57	.63	.65	.60	.58
Insightfulness (Is)	.34	.32	.42	.43	.42	.34
Flexibility (Fx)	-.05	.08	.02	.08	-.10	-.07
Sensitivity (Sn)	-.77	-.74	-.62	-.68	-.73	-.75
Managerial Potential (Mp)	.52	.53	.63	.64	.54	.55
Work Orientation (Wo)	.31	.28	.32	.29	.37	.28
Creative Temperament (Ct)	.38	.52	.52	.59	.49	.39
Leadership (Lp)	.82	.86	.82	.85	.85	.84
Amicability (Ami)	.09	.11	.12	.08	.00	.00
Law Enforcement Orientation (Leo)	.52	.50	.41	.34	.41	.46

(cont'd)

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE *CONT'D***

	Factor 1					
	Simplified Chinese	Traditional Chinese	Simplified Chinese (subsample)	Traditional Chinese (subsample)	Latin American Spanish	U.S. English (normative)
Dominance (Do)	.90	.92	.92	.93	.91	.91
Capacity for Status (Cs)	.82	.83	.82	.84	.79	.80
Sociability (Sy)	.87	.89	.87	.90	.86	.87
Social Presence (Sp)	.77	.68	.80	.73	.73	.77
Self-acceptance (Sa)	.83	.83	.86	.87	.86	.90
Independence (In)	.65	.69	.75	.78	.79	.75
Empathy (Em)	.73	.72	.70	.72	.59	.67
Responsibility (Re)	.10	.20	.09	.22	.23	.30
Social Conformity (So)	.24	.16	.27	.15	.29	.19
Self-control (Sc)	-.33	-.26	-.41	-.32	-.21	-.27
Good Impression (Gi)	.08	.11	.00	.05	.04	-.06
Communality (Cm)	.06	.05	.05	.09	.24	.25
Well-being (Wb)	.36	.29	.41	.31	.46	.38
Tolerance (To)	.21	.12	.24	.13	.23	.29
Achievement via Conformance (Ac)	.26	.33	.27	.37	.47	.48
Achievement via Independence (Ai)	.40	.40	.45	.47	.44	.49
Conceptual Fluency (Cf)	.49	.52	.52	.59	.57	.67
Insightfulness (Is)	.37	.33	.37	.39	.43	.49
Flexibility (Fx)	.00	-.07	.05	-.04	-.02	.14
Sensitivity (Sn)	-.59	-.66	-.61	-.69	-.62	-.37
Managerial Potential (Mp)	.58	.57	.61	.59	.56	.57
Work Orientation (Wo)	.22	.13	.23	.14	.27	.29
Creative Temperament (Ct)	.42	.36	.51	.45	.49	.59
Leadership (Lp)	.77	.82	.82	.86	.79	.82
Amicability (Ami)	.12	.04	.11	.02	.08	.06
Law Enforcement Orientation (Leo)	.27	.41	.33	.50	.43	.32

(cont'd)

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE *CONT'D***

	Factor 2					
	Danish	Dutch	European Spanish	French	German	Swedish
Dominance (Do)	.04	.08	.12	.07	.10	-.04
Capacity for Status (Cs)	.03	.06	.24	.12	.01	-.01
Sociability (Sy)	-.04	.07	.14	.10	.03	-.02
Social Presence (Sp)	-.07	.02	-.01	.05	.09	-.08
Self-acceptance (Sa)	-.19	-.14	-.06	-.03	-.06	-.18
Independence (In)	.21	.23	.33	.30	.40	.16
Empathy (Em)	.03	.13	.25	.12	.05	.03
Responsibility (Re)	.38	.47	.52	.40	.53	.34
Social Conformity (So)	.62	.75	.62	.74	.79	.63
Self-control (Sc)	.80	.81	.89	.76	.79	.82
Good Impression (Gi)	.83	.80	.87	.75	.74	.84
Communality (Cm)	.21	.49	.13	.37	.52	.19
Well-being (Wb)	.68	.71	.64	.78	.79	.64
Tolerance (To)	.60	.62	.75	.73	.67	.65
Achievement via Conformance (Ac)	.34	.54	.49	.43	.53	.35
Achievement via Independence (Ai)	.31	.40	.52	.48	.45	.33
Conceptual Fluency (Cf)	.34	.36	.44	.45	.46	.30
Insightfulness (Is)	.40	.35	.48	.58	.47	.37
Flexibility (Fx)	.06	.00	.09	.12	-.10	.11
Sensitivity (Sn)	-.24	-.01	-.05	-.20	-.15	-.10
Managerial Potential (Mp)	.52	.57	.60	.52	.56	.51
Work Orientation (Wo)	.66	.74	.72	.83	.81	.71
Creative Temperament (Ct)	.04	.01	.18	.18	.05	.06
Leadership (Lp)	.25	.29	.38	.33	.36	.22
Amicability (Ami)	.83	.86	.86	.90	.88	.86
Law Enforcement Orientation (Leo)	.41	.46	.43	.49	.50	.36

(cont'd)

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE *CONT'D***

	Factor 2					
	Simplified Chinese	Traditional Chinese	Simplified Chinese (subsample)	Traditional Chinese (subsample)	Latin American Spanish	U.S. English (normative)
Dominance (Do)	.11	.12	.10	.07	.24	.19
Capacity for Status (Cs)	.13	.14	.15	.08	.35	.19
Sociability (Sy)	.08	.07	.12	.04	.15	.18
Social Presence (Sp)	-.15	-.12	-.11	-.09	.01	-.08
Self-acceptance (Sa)	-.04	-.05	.00	-.07	-.05	-.02
Independence (In)	.33	.36	.31	.28	.35	.29
Empathy (Em)	.11	.08	.11	.08	.35	.21
Responsibility (Re)	.34	.52	.32	.49	.68	.69
Social Conformity (So)	.54	.64	.61	.63	.75	.74
Self-control (Sc)	.81	.87	.78	.84	.89	.84
Good Impression (Gi)	.86	.87	.84	.84	.86	.81
Communality (Cm)	.13	.25	.16	.25	.25	.52
Well-being (Wb)	.59	.68	.69	.72	.72	.73
Tolerance (To)	.69	.75	.71	.77	.76	.68
Achievement via Conformance (Ac)	.39	.55	.44	.49	.69	.70
Achievement via Independence (Ai)	.43	.53	.40	.51	.60	.45
Conceptual Fluency (Cf)	.34	.42	.33	.38	.59	.52
Insightfulness (Is)	.40	.48	.41	.42	.59	.55
Flexibility (Fx)	.09	.10	.02	.09	-.09	-.14
Sensitivity (Sn)	-.19	-.15	-.09	-.14	-.02	-.05
Managerial Potential (Mp)	.60	.65	.58	.63	.67	.61
Work Orientation (Wo)	.63	.75	.73	.79	.81	.83
Creative Temperament (Ct)	.17	.16	.13	.08	.13	.07
Leadership (Lp)	.31	.34	.33	.29	.51	.46
Amicability (Ami)	.77	.84	.85	.87	.88	.87
Law Enforcement Orientation (Leo)	.41	.54	.29	.46	.49	.58

(cont'd)

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE *CONT'D***

	Factor 3					
	Danish	Dutch	European Spanish	French	German	Swedish
Dominance (Do)	.21	.12	.00	-.07	.00	.17
Capacity for Status (Cs)	.57	.48	.27	.32	.34	.53
Sociability (Sy)	.33	.23	.01	.04	.06	.24
Social Presence (Sp)	.52	.48	.31	.31	.32	.39
Self-acceptance (Sa)	.23	.15	-.02	-.01	.03	.19
Independence (In)	.30	.28	.14	.08	.11	.23
Empathy (Em)	.65	.58	.29	.38	.41	.54
Responsibility (Re)	.36	.19	-.02	.04	-.01	.35
Social Conformity (So)	.03	.10	-.07	-.01	-.02	.05
Self-control (Sc)	-.08	-.05	-.05	-.09	-.08	-.01
Good Impression (Gi)	-.04	-.05	-.03	-.09	-.06	.05
Communality (Cm)	.01	.04	.01	-.06	-.17	.01
Well-being (Wb)	.26	.24	.11	.02	.09	.11
Tolerance (To)	.58	.58	.37	.36	.50	.60
Achievement via Conformance (Ac)	.09	-.02	-.12	-.14	-.14	.00
Achievement via Independence (Ai)	.72	.70	.45	.43	.56	.74
Conceptual Fluency (Cf)	.50	.44	.17	.19	.27	.47
Insightfulness (Is)	.52	.59	.36	.27	.39	.52
Flexibility (Fx)	.87	.86	.87	.86	.87	.87
Sensitivity (Sn)	.09	-.05	.33	.30	.10	.11
Managerial Potential (Mp)	.41	.33	.15	.12	.20	.41
Work Orientation (Wo)	.39	.39	.15	.17	.17	.32
Creative Temperament (Ct)	.82	.74	.68	.64	.72	.80
Leadership (Lp)	.26	.19	.01	-.07	.03	.20
Amicability (Ami)	.31	.30	.17	.17	.21	.27
Law Enforcement Orientation (Leo)	-.29	-.26	-.40	-.46	-.29	-.25

(cont'd)

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE *CONT'D***

	Factor 3					
	Simplified Chinese	Traditional Chinese	Simplified Chinese (subsample)	Traditional Chinese (subsample)	Latin American Spanish	U.S. English (normative)
Dominance (Do)	.03	.01	.01	-.03	.00	.01
Capacity for Status (Cs)	.20	.19	.19	.15	.21	.34
Sociability (Sy)	.08	-.04	.11	-.04	-.02	.05
Social Presence (Sp)	.21	.25	.21	.29	.31	.29
Self-acceptance (Sa)	.06	.11	.07	.06	.02	.03
Independence (In)	.20	.25	.13	.08	.09	.23
Empathy (Em)	.19	.21	.29	.27	.23	.45
Responsibility (Re)	.07	.00	.02	-.13	.01	-.04
Social Conformity (So)	.03	.00	-.07	-.08	-.17	-.07
Self-control (Sc)	.12	.08	.07	-.06	-.11	-.02
Good Impression (Gi)	-.06	-.02	-.05	-.15	-.13	.01
Communality (Cm)	-.02	-.14	-.05	-.20	-.19	-.31
Well-being (Wb)	.08	.10	-.02	.06	.03	.11
Tolerance (To)	.34	.43	.27	.37	.39	.51
Achievement via Conformance (Ac)	-.08	-.19	-.07	-.34	-.16	-.08
Achievement via Independence (Ai)	.48	.48	.48	.35	.43	.61
Conceptual Fluency (Cf)	.26	.22	.27	.13	.21	.27
Insightfulness (Is)	.29	.33	.26	.21	.28	.37
Flexibility (Fx)	.90	.87	.88	.84	.81	.85
Sensitivity (Sn)	.25	.14	.34	.19	.18	.00
Managerial Potential (Mp)	.17	.17	.13	.10	.17	.30
Work Orientation (Wo)	.15	.14	.13	.07	.01	.17
Creative Temperament (Ct)	.75	.78	.71	.73	.69	.67
Leadership (Lp)	.08	.00	.06	-.06	-.04	.01
Amicability (Ami)	.14	.20	.07	.16	.11	.23
Law Enforcement Orientation (Leo)	.02	-.15	-.03	-.30	-.39	-.26

(cont'd)

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE *CONT'D***

	Factor 4					
	Danish	Dutch	European Spanish	French	German	Swedish
Dominance (Do)	.22	.18	.11	.15	.19	.24
Capacity for Status (Cs)	.23	.27	.05	.25	.40	.20
Sociability (Sy)	.27	.18	.15	.13	.16	.24
Social Presence (Sp)	.07	-.04	.25	-.15	-.15	.11
Self-acceptance (Sa)	.24	.12	.21	.05	.13	.18
Independence (In)	.17	.00	.27	.01	.00	.19
Empathy (Em)	.23	.18	-.02	.20	.29	.16
Responsibility (Re)	.66	.68	.60	.77	.64	.67
Social Conformity (So)	.44	.05	.53	.13	.13	.44
Self-control (Sc)	.16	.14	.11	.32	.25	.13
Good Impression (Gi)	.15	.19	-.07	.33	.33	.04
Communality (Cm)	.62	.14	.88	.28	-.15	.69
Well-being (Wb)	.15	-.16	.39	-.09	-.08	.25
Tolerance (To)	.24	.11	.19	.20	.21	.15
Achievement via Conformance (Ac)	.75	.61	.55	.68	.61	.67
Achievement via Independence (Ai)	.31	.30	.32	.28	.36	.21
Conceptual Fluency (Cf)	.44	.39	.36	.35	.37	.37
Insightfulness (Is)	.25	.25	.35	.17	.14	.25
Flexibility (Fx)	-.09	-.16	-.12	-.11	-.15	-.12
Sensitivity (Sn)	.21	.40	.09	.32	.18	.26
Managerial Potential (Mp)	.30	.19	.06	.23	.35	.23
Work Orientation (Wo)	.34	.15	.37	.10	.06	.32
Creative Temperament (Ct)	.04	.04	.15	.04	.02	.09
Leadership (Lp)	.31	.21	.29	.23	.23	.33
Amicability (Ami)	.18	.05	.21	.07	.11	.17
Law Enforcement Orientation (Leo)	.15	-.04	.25	.05	.03	.10

(cont'd)

## Factor Congruence

The comparison of factor structures across samples has long been used in psychological research to determine whether the factor structure of an assessment is the same in two or more different groups (Chan, Ho, Leung, Chan, & Yung, 1999). Factor structure similarity of personality inventories has been studied by many researchers (Barrett, Petrides, Eysenck, & Eysenck, 1998; De Bruin, Nel, & Comrey, 1997; Noller, Law, & Comrey, 1988; Rodrigues & Comrey, 1974; Stumpf, 1993). Similarity of factors is often evaluated by using the factor congruence coefficient (Burt, 1948; Reise, Waller, & Comrey, 2000; Tucker, 1951; Wrigley & Neuhaus, 1955). To examine precisely the similarity of factor structure of each

language separately compared with the U.S. English sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used (Comrey, 1988).\* The U.S. sample used for this analysis was a commercial sample from the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table 8. The table can be read in a manner similar to the way correlation matrices are read, where the diagonal elements (in bold) show the degree of congruence between corresponding factors and the off-diagonal elements show degree of similarity between the remaining factors in the analysis.

\*This method was programmed by Andrew Comrey, who kindly permitted us to use his program and who advised us on its proper application.

**TABLE 7. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSES OF CPI 260® SCALES BY LANGUAGE SAMPLE *CONT'D***

	Factor 4					
	Simplified Chinese	Traditional Chinese	Simplified Chinese (subsample)	Traditional Chinese (subsample)	Latin American Spanish	U.S. English (normative)
Dominance (Do)	.23	.14	.23	.14	.06	-.15
Capacity for Status (Cs)	.12	.10	.12	.10	.05	.08
Sociability (Sy)	.24	.20	.24	.20	-.02	-.04
Social Presence (Sp)	.29	.44	.29	.44	.19	-.13
Self-acceptance (Sa)	.25	.20	.25	.20	.24	-.06
Independence (In)	.44	.21	.44	.21	.07	-.31
Empathy (Em)	-.09	-.07	-.09	-.07	.05	.05
Responsibility (Re)	.74	.55	.74	.55	.39	.43
Social Conformity (So)	.62	.48	.62	.48	.22	.13
Self-control (Sc)	.25	.06	.25	.06	.01	-.03
Good Impression (Gi)	.15	-.09	.15	-.09	-.15	-.14
Communality (Cm)	.88	.82	.88	.82	.76	.17
Well-being (Wb)	.53	.40	.53	.40	.11	-.23
Tolerance (To)	.35	.12	.35	.12	.07	.08
Achievement via Conformance (Ac)	.73	.54	.73	.54	.19	.28
Achievement via Independence (Ai)	.46	.19	.46	.19	.04	.05
Conceptual Fluency (Cf)	.60	.45	.60	.45	.16	.03
Insightfulness (Is)	.49	.33	.49	.33	.02	-.01
Flexibility (Fx)	-.12	-.21	-.12	-.21	-.22	-.04
Sensitivity (Sn)	.03	.19	.03	.19	.45	.80
Managerial Potential (Mp)	.19	.03	.19	.03	-.05	-.07
Work Orientation (Wo)	.56	.43	.56	.43	.17	-.08
Creative Temperament (Ct)	.23	.04	.23	.04	.11	-.04
Leadership (Lp)	.45	.30	.45	.30	.11	-.11
Amicability (Ami)	.40	.22	.40	.22	.08	-.04
Law Enforcement Orientation (Leo)	.46	.20	.46	.20	-.13	-.26

Note: Danish  $N = 499$ , Dutch  $N = 469$ , European Spanish  $N = 431$ , French  $N = 490$ , German  $N = 518$ , Swedish  $N = 481$ , Simplified Chinese  $N = 286$ , Traditional Chinese  $N = 649$ , Simplified Chinese (subsample)  $n = 225$ , Traditional Chinese (subsample)  $n = 459$ , Latin American Spanish  $N = 261$ , U.S. English (normative)  $N = 6,000$ .

The average coefficients for each factor are as follows: factor 1 = .98, factor 2 = .99, factor 3 = .90, and factor 4 = .77. Coefficients of .90 or higher are typically accepted as showing congruence between two factors (Guadagnoli & Velicer, 1991). Others have suggested the minimum range for considering two factors to be equivalent is .70–.90 (Hall & Kaye, 1977). Therefore, it can be concluded that the factorial structure of the U.S. CPI 260 scales are very similar to those of the other language samples examined. Factors 1 and 2 are nearly identical between the U.S. sample and each of the other samples. Factor 3 is also very similar between the U.S. sample and

other language samples. Finally, factor 4 is very similar between the U.S. sample and the Danish, Dutch, European Spanish, French, Swedish, Traditional Chinese, and Latin American Spanish samples and Simplified Chinese and Traditional Chinese subsamples. However, the factor similarity between the U.S. and German samples (.66), and the U.S. and Simplified Chinese samples (.66) on factor 4 is not as strong. A portion of this factor congruence analysis was presented at a conference in 2010 (Schaubhut, Morris, & Thompson, 2010).

**TABLE 8. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE U.S. ENGLISH AND INTERNATIONAL SAMPLES**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
Danish: Factor 1	.97			
Danish: Factor 2	.26	.98		
Danish: Factor 3	.71	.50	.84	
Danish: Factor 4	.56	.73	.12	.83
Dutch: Factor 1	.98			
Dutch: Factor 2	.31	.98		
Dutch: Factor 3	.67	.51	.84	
Dutch: Factor 4	.42	.54	.24	.83
European Spanish: Factor 1	.98			
European Spanish: Factor 2	.39	.99		
European Spanish: Factor 3	.20	.17	.95	
European Spanish: Factor 4	.48	.67	.04	.74
French: Factor 1	.99			
French: Factor 2	.39	.99		
French: Factor 3	.35	.21	.97	
French: Factor 4	.34	.64	.13	.85
German: Factor 1	.98			
German: Factor 2	.36	.98		
German: Factor 3	.48	.33	.94	
German: Factor 4	.46	.64	.21	.66
Swedish: Factor 1	.98			
Swedish: Factor 2	.22	.98		
Swedish: Factor 3	.65	.51	.86	
Swedish: Factor 4	.55	.68	.10	.84
Simplified Chinese: Factor 1	.99			
Simplified Chinese: Factor 2	.35	.99		
Simplified Chinese: Factor 3	.44	.38	.84	
Simplified Chinese: Factor 4	.56	.80	.06	.66
Traditional Chinese: Factor 1	.98			
Traditional Chinese: Factor 2	.36	.99		
Traditional Chinese: Factor 3	.42	.35	.88	
Traditional Chinese: Factor 4	.51	.62	.03	.73
Simplified Chinese (subsample): Factor 1	.99			
Simplified Chinese (subsample): Factor 2	.36	.99		
Simplified Chinese (subsample): Factor 3	.42	.28	.89	
Simplified Chinese (subsample): Factor 4	.52	.73	.07	.73
Traditional Chinese (subsample): Factor 1	.98			
Traditional Chinese (subsample): Factor 2	.32	.99		
Traditional Chinese (subsample): Factor 3	.30	.11	.92	
Traditional Chinese (subsample): Factor 4	.45	.54	.08	.80
Latin American Spanish: Factor 1	.98			
Latin American Spanish: Factor 2	.45	.98		
Latin American Spanish: Factor 3	.37	.14	.96	
Latin American Spanish: Factor 4	.26	.29	.09	.78

## Correlations with Other Measures

Convergent validity and discriminant validity are often examined by looking at the pattern of relationships between measures on different instruments. An initial examination of the two was conducted for the adapted CPI 260 assessments by examining correlations between CPI 260 folk scales and adjectives checked by respondents on the *Adjective Check List* (ACL; Gough & Heilbrun, 1983). A second analysis of convergent and discriminant validity examined correlations between the CPI 260 folk and special purpose scales with measures of the Big Five personality approach, scored from the ACL. Finally, analyses of specific CPI 260 scales with demographic items were reported, providing additional validity evidence for the translated or adapted versions of the CPI 260 assessment.

### *Adjective Check List*

First, a portion of respondents from each sample also completed translated versions of the *Adjective Check List*. The ACL consists of 300 different adjectives, such as *intelligent*, *alert*, *clear-thinking*, *poised*, and *noisy*, encompassing a wide variety of behaviors. An additional 69 research adjectives were also included. Respondents were asked to select the ones they believed were self-descriptive, and the results provided descriptions of them (Gough & Heilbrun, 1983). Respondents with too many or too few adjectives checked were omitted prior to analysis. According to Gough and Heilbrun (1983), results for any respondent with fewer than 20 adjectives or more than 250 adjectives checked should be very cautiously interpreted; those with fewer than 10 and more than 270 checked are almost always invalid. The more conservative approach was taken here, and respondents with fewer than 20 adjectives or more than 250 adjectives checked were removed from the sample. The Simplified Chinese and Traditional Chinese subsamples were not included in this analysis due to small sample sizes.

Selected correlations of adjectives from the ACL with CPI 260 scales are shown in Table 9 for each language. The correlations are similar to those reported in the *CPI 260® Manual* for a sample of U.S. college students (Gough & Bradley, 2005). However, the manual reports ACL descriptions given by panels of observers rather than self-report, as is shown here. These correlations are also consistent with what is expected given the content of each of the CPI 260 scales. For example, Dominance measures prosocial dominance, strength of will, and perseverance in pursuing goals. High scores on Dominance were associated with the adjectives *ambitious*, *enterprising*, and *outgoing*, while low scores were associated with *inhibited*, *withdrawn*, and *retiring*. Also, Responsibility measures awareness of societal rules and willingness to abide when appropriate. The adjectives *conscientious* and *rational* were related to high scores on Responsibility, whereas *distrustful* and *rattlebrained* were associated with low scores. High scores on Leadership, which identifies individuals with good leadership skills, were related to the adjectives *ambitious* and *enterprising*, whereas low scores were related to the adjectives *timid* and *awkward*.

While the general pattern of correlations between the ACL and CPI 260 assessments holds up across each of the nine languages, there is some deviation in the direction of correlations between certain adjectives and CPI 260 scales. For example, for the Simplified and Traditional Chinese samples, the correlations for *calm* and *patient* with Self-control are slightly negative rather than positive. The languages with the largest number of deviations are Simplified Chinese, Traditional Chinese, European Spanish, and Latin American Spanish, which had the most. There may be cultural differences in the expression or understanding of adjectival self-ratings. This, however, should not be a concern, because a majority of the other analyses contained in this technical brief demonstrate appropriate psychometric functioning of all CPI 260 translations. The uniqueness of the Latin American Spanish sample used for this ACL analysis affected the results of this analysis but none of the other analyses.

**TABLE 9. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale and ACL Adjectives	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
<b>Dominance (Do)</b>									
ambitious	.26	.26	.19	.30	.26	.22	.32	.26	-.01
enterprising	.28	.27	.22	.33	.29	.35	.28	.29	.00
initiative	.33	.28	.25	.31	.35	.36	.29	.53	.16
outgoing	.25	.26	.16	.18	.43	.43	.33	.37	.04
talkative	.32	.31	.28	.29	.31	.37	.16	.39	.08
inhibited	-.22	-.31	-.04	-.12	-.40	-.10	-.38	-.27	.17
retiring	-.41	-.29	-.23	-.41	-.18	-.22	-.11	.03	.08
silent	-.34	-.26	-.30	-.25	-.23	-.35	-.30	-.34	.06
timid	-.27	-.21	.05	-.43	-.47	-.06	-.37	-.25	.03
withdrawn	-.35	-.22	-.10	-.27	-.30	-.32	-.46	-.38	.01
<b>Capacity for Status (Cs)</b>									
enterprising	.26	.21	.24	.30	.26	.26	.15	.22	-.06
imaginative	.30	.21	.12	.24	.34	.29	.14	.19	-.01
interests wide	.30	.33	.25	.27	.32	.40	.24	.26	.08
outgoing	.25	.24	.07	.17	.35	.32	.33	.28	.07
talkative	.31	.24	.23	.19	.30	.28	.11	.30	.06
awkward	-.18	-.15	-.11	-.13	-.23	-.15	-.24	-.01	-.11
interests narrow	-.25	-.22	-.16	-.21	-.17	-.33	-.26	-.45	.03
silent	-.29	-.23	-.25	-.18	-.20	-.26	-.37	-.38	.10
timid	-.20	-.15	-.01	-.35	-.39	-.45	-.21	-.25	.02
withdrawn	-.28	-.15	-.02	-.22	-.20	-.22	-.43	-.40	.00
<b>Sociability (Sy)</b>									
active	.20	.29	.31	.25	.35	.28	.22	.19	.07
enterprising	.26	.25	.21	.26	.36	.31	.23	.22	.06
initiative	.26	.19	.20	.22	.27	.32	.34	.53	.11
sociable	.19	.20	.34	.22	.40	.38	.27	.46	.03
talkative	.40	.29	.22	.23	.32	.35	.11	.44	.06
nervous	-.24	-.16	-.12	-.23	-.21	-.27	-.24	-.06	.02
reserved	-.24	-.17	-.23	-.28	-.19	-.23	-.14	-.26	.12
silent	-.34	-.27	-.24	-.23	-.25	-.34	-.34	-.32	.07
timid	-.25	-.23	.05	-.38	-.39	-.04	-.32	-.26	.03
withdrawn	-.35	-.25	-.09	-.25	-.32	-.30	-.34	-.39	.04
<b>Social Presence (Sp)</b>									
adventurous	.24	.18	.24	.20	.32	.27	.26	.30	-.07
energetic	.18	.13	.22	.15	.19	.24	.21	.23	.07
outgoing	.22	.13	.10	.14	.35	.36	.38	.32	-.01
spontaneous	.21	.16	.22	.22	.23	.29	.05	.11	.03
talkative	.25	.18	.18	.19	.25	.28	.22	.39	-.02
dull	-.35	-.12	-.07	-.21	-.26	-.23	-.36	-.05	.03
fearful	-.18	-.22	-.13	-.17	-.21	-.09	-.21	-.26	.10
reserved	-.18	-.19	-.15	-.27	-.17	-.18	-.08	-.12	.07
silent	-.31	-.22	-.18	-.19	-.21	-.29	-.28	-.13	.00
withdrawn	-.33	-.21	-.02	-.20	-.26	-.28	-.35	-.26	.06

(cont'd)

**TABLE 9. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
<b>Self-acceptance (Sa)</b>									
ambitious	.23	.28	.19	.31	.29	.16	.20	.09	-.07
assertive	.20	.30	.07	.24	.41	.12	.16	.36	.09
enterprising	.24	.21	.26	.29	.30	.27	.21	.11	.03
self-confident	.38	.35	.34	.37	.46	.34	.18	.33	.13
talkative	.32	.29	.26	.23	.30	.33	.10	.29	.04
anxious	-.26	-.19	-.07	-.23	-.34	-.40	-.32	-.14	.10
awkward	-.17	-.15	-.11	-.16	-.30	-.22	-.40	-.16	-.15
timid	-.23	-.18	.07	-.38	-.41	-.05	-.37	-.32	.00
unambitious	-.14	-.21	-.05	-.14	-.22	-.03	-.07	-.20	-.06
withdrawn	-.27	-.23	-.07	-.24	-.32	-.28	-.33	-.41	.02
<b>Independence (In)</b>									
confidant	.29	.37	.27	.28	.16	.36	.42	.43	-.03
enterprising	.26	.23	.12	.28	.15	.31	.15	.15	-.01
independent	.21	.22	.26	.17	.21	.14	.21	.16	.07
initiative	.26	.22	.18	.23	.20	.34	.25	.37	.10
resourceful	.24	.14	.14	.18	.21	.19	-.03	.31	.04
confused	-.35	-.18	-.20	-.17	-.21	-.18	-.20	-.14	-.05
gloomy	-.17	-.22	-.04	-.25	-.28	-.18	-.10	-.07	.07
nervous	-.41	-.29	-.06	-.19	-.29	-.37	-.27	-.23	-.09
timid	-.35	-.20	-.23	-.34	-.45	-.13	-.42	-.24	-.03
withdrawn	-.34	-.20	-.10	-.21	-.24	-.25	-.32	-.38	.00
<b>Empathy (Em)</b>									
confident	.20	.19	.21	.22	.15	.30	.26	.17	-.02
enterprising	.27	.14	.18	.26	.22	.22	.11	.11	-.12
interests wide	.32	.20	.25	.30	.25	.40	.19	.22	.12
outgoing	.20	.18	.15	.18	.29	.32	.22	.29	.05
sociable	.21	.19	.24	.23	.30	.31	.31	.37	.02
distrustful	-.22	-.13	-.19	-.16	-.19	-.11	-.13	-.17	-.04
interests narrow	-.23	-.20	-.11	-.19	-.20	-.34	-.28	-.21	-.05
nervous	-.16	-.17	-.09	-.17	-.29	-.13	-.17	-.14	-.01
silent	-.24	-.16	-.10	-.17	-.13	-.21	-.34	-.20	.09
withdrawn	-.22	-.16	-.09	-.15	-.23	-.18	-.35	-.37	.04
<b>Responsibility (Re)</b>									
conscientious	.14	.20	.08	.30	.13	.14	-.04	.21	.08
interests wide	.21	.23	.01	.16	.22	.23	.15	-.15	.16
practical	.17	.13	.08	.15	.18	.27	-.02	.14	.05
rational	.20	.22	.09	.16	.23	.15	.19	.03	.08
responsible	.13	.08	.14	.20	.12	.15	.26	.07	-.02
coarse	-.12	-.13	-.16	-.11	-.14	-.19	-.01	-.16	.01
distrustful	-.26	-.12	-.22	-.10	-.19	-.04	-.01	-.09	.08
immature	-.15	-.14	-.09	-.17	-.11	-.08	-.08	-.31	-.01
interests narrow	-.14	-.21	-.15	-.15	-.16	-.20	-.14	-.03	.07
rattlebrained	-.17	-.14	-.04	-.15	-.21	-.20	-.19	-.05	-.08

(cont'd)

**TABLE 9. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
<b>Social Conformity (So)</b>									
optimistic	.13	.04	.04	.18	.14	.09	.25	.17	.05
patient	.04	.11	.13	.07	.18	.20	.04	.00	.05
reasonable	.10	.09	.08	.11	.20	.08	.03	.01	.03
relaxed	.11	.06	.00	.08	.19	.16	.00	.05	.13
wholesome	.01	.05	.15	.22	.16	.08	.07	.07	.08
dissatisfied	-.25	-.12	-.27	-.27	-.28	-.31	-.25	-.18	-.05
distrustful	-.30	-.13	-.22	-.16	-.30	-.18	-.09	-.26	-.03
impulsive	-.19	-.17	-.15	-.17	-.15	-.10	-.17	-.28	.08
rebellious	-.12	-.15	-.07	-.19	-.18	-.29	.02	-.26	.14
restless	-.23	-.16	-.15	-.12	-.14	-.19	-.13	-.18	.03
<b>Self-control (Sc)</b>									
calm	.30	.11	.12	.14	.27	.25	-.01	-.09	.09
modest	.20	.16	.07	.17	.09	.06	.23	.05	.05
patient	.13	.20	.10	.11	.24	.09	-.02	-.01	.14
peaceable	.14	.13	-.01	.07	.10	.04	.15	.10	.12
quiet	.24	.09	.05	.11	.13	.09	.19	.13	.01
adventurous	-.21	-.17	-.24	-.19	-.16	-.21	-.08	-.29	.03
aggressive	-.29	-.09	-.26	-.19	-.23	-.23	-.26	-.20	-.07
impulsive	-.24	-.23	-.22	-.24	-.19	-.23	-.13	-.41	.13
rebellious	-.18	-.23	-.13	-.18	-.27	-.35	.03	-.39	.03
sarcastic	-.19	-.20	-.03	-.24	-.17	-.32	.02	-.18	-.03
<b>Good Impression (Gi)</b>									
conscientious	.08	.05	.00	.26	.19	.13	.16	.15	.04
patient	.08	.11	.17	.08	.23	.02	.19	.06	.21
peaceable	.03	.12	.00	.14	.08	.01	.09	.11	.23
stable	.17	.13	.15	.12	.12	.04	.13	-.13	.09
tactful	.11	.07	.17	.12	.11	.03	.06	-.08	.15
changeable	-.22	-.27	-.21	-.15	-.25	-.15	-.11	-.17	.07
cynical	-.14	-.20	-.09	-.20	-.26	-.18	-.09	-.24	.06
impulsive	-.20	-.21	-.14	-.20	-.18	-.19	-.16	-.38	.07
restless	-.20	-.17	-.14	-.14	-.16	-.17	-.19	-.19	.09
temperamental	-.25	-.19	-.13	-.19	-.12	-.21	-.05	-.33	.05
<b>Communality (Cm)</b>									
capable	.24	.08	.08	.17	.15	.28	.16	.14	-.03
civilized	.14	.09	.13	.11	.15	.21	.09	.09	.03
cooperative	.11	.14	.18	.13	.09	.15	.13	.25	.07
fair-minded	.12	.16	.08	.09	.15	.06	.10	.04	.05
reliable	.19	.08	.06	.22	.08	.18	.18	.28	.04
complaining	-.15	-.16	.04	-.21	-.14	-.16	-.10	-.17	.10
dissatisfied	-.11	-.09	-.10	-.06	-.12	-.09	-.17	.01	.06
self-pitying	-.16	-.15	.04	-.03	-.09	-.11	-.24	-.10	.06
spineless	-.06	-.24	.15	-.15	-.12	-.03	-.24	-.23	.06
sour	-.10	-.03	.00	-.01	-.08	-.03	-.18	-.06	.01

(cont'd)

**TABLE 9. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
<b>Well-being (Wb)</b>									
active	.22	.18	.17	.24	.23	.15	.07	.19	-.06
cheerful	.15	.19	.16	.21	.13	.27	.28	.42	-.12
clear-thinking	.24	.22	.18	.28	.23	.20	.24	.10	.04
confident	.13	.21	.19	.15	.23	.28	.37	.30	.07
efficient	.15	.20	.07	.13	.17	.13	.33	.06	.01
confused	-.36	-.24	-.20	-.16	-.23	-.21	-.23	-.19	-.03
dissatisfied	-.40	-.28	-.27	-.31	-.39	-.29	-.17	-.21	-.12
moody	-.24	-.21	-.11	-.22	-.24	-.09	-.23	-.23	.08
nervous	-.36	-.25	-.10	-.18	-.33	-.32	-.32	-.26	-.04
pessimistic	-.24	-.19	-.28	-.22	-.31	-.31	-.30	-.22	-.04
<b>Tolerance (To)</b>									
clear-thinking	.12	.13	.08	.12	.09	.14	-.01	-.08	.09
contented	.28	.22	-.03	.14	.12	.16	-.07	.12	.04
honest	.10	.04	.16	.10	.10	.10	.07	.05	.12
interests wide	.16	.10	-.04	.15	.12	.21	.05	-.10	.13
optimistic	.12	.12	.10	.22	.12	.01	.16	.12	.06
bitter	-.31	-.12	-.19	-.12	-.11	-.07	.07	-.41	.09
complaining	-.15	-.18	-.11	-.14	-.17	-.12	-.17	-.34	-.06
dissatisfied	-.20	-.16	-.17	-.18	-.20	-.14	-.01	-.30	-.05
distrustful	-.30	-.19	-.15	-.15	-.28	-.12	.01	-.28	-.05
nervous	-.21	-.18	-.10	-.19	-.21	-.11	-.17	-.33	.01
<b>Achievement via Conformance (Ac)</b>									
efficient	.19	.23	.08	.22	.12	.22	.39	.11	.10
industrious	.09	.15	.00	.08	.20	.22	.19	.18	.13
organized	.20	.22	.25	.22	.15	.28	.28	.20	.20
planful	.23	.20	.17	.18	.23	.24	.09	.13	.23
thorough	.19	.17	.24	.16	.19	.21	-.20	.11	.23
aloof	-.18	-.11	-.10	-.18	-.14	-.07	.02	.03	.07
coarse	-.30	-.23	-.14	-.10	-.18	-.24	.02	-.10	.15
disorderly	-.16	-.17	-.16	-.15	-.19	-.11	-.08	-.15	-.09
distractible	-.23	-.17	-.18	-.19	-.30	-.14	-.08	-.42	-.02
rattlebrained	-.30	-.13	-.02	-.15	-.17	-.18	-.11	-.20	.05
<b>Achievement via Independence (Ai)</b>									
capable	.32	.36	.17	.17	.11	.23	-.01	.20	-.03
clear-thinking	.21	.16	.05	.17	.10	.15	.07	.14	.01
intelligent	.22	.26	.16	.16	.17	.22	.04	.18	.12
interests wide	.25	.22	.11	.24	.22	.37	.12	.05	.13
rational	.20	.22	.13	.17	.20	.11	.09	.19	.03
annoyed	-.29	-.14	-.05	-.19	-.17	-.02	-.21	-.24	.08
cowardly	-.22	-.07	-.14	-.15	-.18	-.12	-.19	-.28	-.01
distrustful	-.26	-.18	-.15	-.14	-.25	-.09	-.02	-.17	-.03
fearful	-.20	-.14	-.10	-.17	-.15	-.08	-.24	-.23	.05
interests narrow	-.17	-.19	-.20	-.17	-.15	-.28	-.03	-.13	.10

(cont'd)

**TABLE 9. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
<b>Conceptual Fluency (Cf)</b>									
clear-thinking	.23	.22	.20	.26	.22	.20	.24	.11	.06
confident	.20	.22	.20	.25	.19	.30	.19	.23	.07
initiative	.19	.16	.17	.26	.21	.29	.16	.22	.10
intelligent	.24	.39	.15	.19	.23	.29	-.08	.14	.22
interests wide	.32	.29	.19	.26	.35	.37	.13	.12	.19
absent-minded	-.13	-.11	-.13	-.21	-.24	-.19	-.10	-.41	-.10
awkward	-.23	-.12	-.16	-.21	-.31	-.15	-.20	-.16	-.02
confused	-.29	-.17	-.21	-.15	-.19	-.04	-.19	-.13	-.01
fearful	-.22	-.18	-.17	-.21	-.26	-.11	-.23	-.32	-.01
interests narrow	-.22	-.30	-.16	-.30	-.22	-.32	-.14	-.27	.03
<b>Insightfulness (Is)</b>									
alert	.12	.21	.16	.24	.14	.03	.06	.12	.10
clear-thinking	.22	.15	.19	.21	.21	.18	.07	.13	.01
efficient	.11	.23	.16	.15	.13	.03	.14	.07	.05
intelligent	.25	.36	.13	.14	.18	.17	-.05	.17	.14
rational	.23	.20	.14	.08	.18	.08	.09	.13	.04
anxious	-.31	-.11	-.06	-.27	-.32	-.26	-.36	-.28	.01
dissatisfied	-.22	-.17	-.19	-.23	-.24	-.15	-.18	.00	-.08
distrustful	-.26	-.12	-.20	-.20	-.18	-.13	-.12	-.05	.03
fearful	-.22	-.16	-.11	-.17	-.18	-.11	-.16	-.21	.06
interests narrow	-.13	-.27	-.12	-.23	-.15	-.24	-.02	-.10	.04
<b>Flexibility (Fx)</b>									
changeable	.10	.06	.04	.11	.17	.02	.22	.13	-.04
complicated	.06	.02	.18	.21	.11	.02	.12	.12	-.14
imaginative	.07	.08	-.02	.11	.03	-.02	.04	.11	-.12
interests wide	.11	.13	-.07	.01	.03	.21	-.12	.02	-.03
unconventional	.13	.16	.12	.19	.24	.05	-.06	.09	-.01
autocratic	-.02	-.03	-.11	-.04	-.08	-.05	-.09	-.18	-.06
cautious	-.10	-.22	-.01	-.05	-.12	-.01	.00	-.07	-.02
conservative	-.04	-.12	-.22	-.14	-.12	-.13	.01	-.18	-.14
fearful	-.07	-.14	.13	-.10	-.01	-.10	-.03	-.07	.10
formal	-.04	-.05	-.13	-.09	-.13	-.18	-.05	-.04	.01
<b>Sensitivity (Sn)</b>									
anxious	.30	.21	.11	.34	.41	.36	.21	.23	.09
fearful	.25	.21	.09	.16	.25	.15	.02	.28	.07
feminine	.12	.32	.14	.16	.12	.26	.23	.04	.01
inhibited	.17	.25	.09	.11	.37	.15	.01	.19	-.15
nervous	.32	.18	.05	.16	.25	.32	-.04	.27	-.06
adventurous	-.18	-.26	-.21	-.27	-.27	-.19	-.24	-.22	.01
arrogant	-.10	-.11	-.01	-.16	-.15	-.10	.10	-.07	-.07
assertive	-.10	-.17	-.03	-.22	-.32	-.15	-.22	-.16	.00
masculine	-.22	-.31	-.14	-.23	-.35	-.27	-.24	-.06	.09
outspoken	-.12	-.12	-.20	-.17	-.09	-.15	-.34	-.11	-.06

(cont'd)

**TABLE 9. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
<b>Managerial Potential (Mp)</b>									
efficient	.18	.20	.11	.18	.20	.11	.27	.02	.08
enterprising	.23	.16	.07	.19	.19	.20	.05	.14	.07
initiative	.14	.24	.04	.24	.17	.27	.28	.23	.15
poised	.20	.23	.08	.25	.28	.17	.15	-.07	.25
self-confident	.26	.22	.25	.29	.34	.22	.11	.20	.20
awkward	-.29	-.17	-.13	-.23	-.29	-.15	-.21	-.12	-.03
interests narrow	-.24	-.18	-.13	-.21	-.15	-.29	-.20	-.10	.00
suspicious	-.31	-.18	.02	-.16	-.12	-.24	-.31	-.29	.04
timid	-.20	-.18	-.08	-.36	-.33	-.13	-.29	-.19	-.03
withdrawn	-.31	-.19	-.10	-.21	-.20	-.16	-.27	-.30	.01
<b>Work Orientation (Wo)</b>									
conscientious	.10	.18	.05	.24	.22	.08	.13	.24	-.02
reliable	.26	.08	.04	.17	.07	.14	.05	.16	.14
responsible	.11	.13	.16	.13	.16	.15	.19	.17	.05
tactful	.23	.18	.22	.16	.12	.10	-.04	.09	.12
thorough	.09	.12	.20	.12	.11	.14	-.18	-.17	.16
dissatisfied	-.28	-.25	-.17	-.19	-.35	-.32	-.15	-.26	-.02
distractible	-.24	-.16	-.12	-.15	-.29	-.15	-.16	-.26	-.03
high-strung	-.31	-.22	-.22	-.16	-.32	-.21	-.21	-.23	.16
moody	-.20	-.16	-.08	-.16	-.25	-.15	-.12	-.30	.01
restless	-.30	-.17	-.07	-.11	-.18	-.19	-.19	-.21	.03
<b>Creative Temperament (Ct)</b>									
capable	.26	.27	.10	.08	.15	.17	-.11	.12	-.01
enterprising	.15	.18	.05	.18	.14	.11	-.07	-.08	-.10
independent	.11	.22	.19	.14	.12	.05	.04	.10	-.02
interests wide	.24	.22	.20	.13	.27	.27	-.02	.15	.03
original	.17	.13	.09	.17	.11	.13	.07	.02	-.12
anxious	-.22	-.22	-.01	-.22	-.25	-.21	-.19	-.16	-.07
cautious	-.22	-.27	-.05	-.09	-.22	-.21	-.14	.00	-.11
dull	-.21	-.12	-.18	-.14	-.20	-.15	-.22	-.13	.00
reserved	-.10	-.18	-.09	-.15	-.12	-.21	-.10	-.17	-.08
touchy	-.14	-.15	-.08	-.17	-.10	-.10	-.08	-.15	.01
<b>Leadership (Lp)</b>									
ambitious	.20	.19	.10	.27	.25	.23	.16	.18	.03
enterprising	.33	.24	.20	.35	.27	.36	.14	.27	.01
forceful	.18	.28	.04	.19	.28	.23	.22	.32	.10
initiative	.30	.26	.19	.30	.31	.37	.26	.44	.15
self-confident	.42	.34	.41	.36	.45	.31	.15	.34	.16
awkward	-.31	-.27	-.16	-.23	-.42	-.23	-.31	-.01	-.08
inhibited	-.23	-.31	-.06	-.13	-.43	-.13	-.34	-.31	.16
silent	-.35	-.22	-.23	-.21	-.18	-.34	-.29	-.29	.08
timid	-.28	-.22	-.04	-.42	-.48	-.16	-.36	-.24	.04
withdrawn	-.38	-.18	-.14	-.26	-.26	-.33	-.36	-.37	.04

(cont'd)

**TABLE 9. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
<b>Amicability (Ami)</b>									
contented	.26	.31	.01	.11	.25	.16	.04	.15	.17
patient	.12	.18	.02	.09	.21	.11	.08	.06	.15
peaceable	.13	.10	-.03	.13	.12	.01	.17	.11	.11
relaxed	.13	.16	.03	.08	.20	.18	.07	.10	.06
wholesome	.08	.12	.18	.18	.11	.01	.07	.04	.07
arrogant	-.15	-.09	-.01	-.12	-.21	-.05	-.06	-.24	-.03
dissatisfied	-.28	-.21	-.23	-.24	-.38	-.28	-.15	-.27	-.10
headstrong	-.12	-.17	-.04	-.20	-.27	-.15	-.21	-.07	.05
sarcastic	-.17	-.16	.01	-.16	-.21	-.30	-.09	-.19	.01
suspicious	-.23	-.23	-.06	-.25	-.15	-.30	-.30	-.29	.04
<b>Law Enforcement Orientation (Leo)</b>									
determined	.17	.14	.10	.05	.19	.12	-.04	.03	.15
efficient	.21	.18	.10	.09	.13	.13	.09	.02	.09
organized	.19	.09	.17	.11	.15	.15	.22	.03	.12
painstaking	.21	.10	.05	.15	.11	.09	-.28	-.08	.11
reasonable	.09	.11	.01	.14	.14	.12	.01	-.07	.11
absent-minded	-.14	-.19	-.29	-.19	-.22	-.18	-.04	-.43	.00
changeable	-.09	-.16	-.15	-.16	-.13	-.10	-.20	-.27	.15
confused	-.24	-.18	-.11	-.21	-.18	-.10	-.16	-.21	-.02
disorderly	-.09	-.17	-.12	-.20	-.12	-.03	-.08	-.28	-.14
vindictive	-.11	-.05	.04	-.11	-.12	-.13	-.09	-.07	.16

Note: Danish  $n = 301$ , Dutch  $n = 283$ , European Spanish  $n = 213$ , French  $n = 295$ , German  $n = 340$ , Swedish  $n = 261$ , Simplified Chinese  $n = 79$ , Traditional Chinese  $n = 101$ , Latin American Spanish  $n = 181$ .

### Five-Factor Model Dimensions from the ACL

Researchers have also used the ACL instrument to score the Five-Factor Model of personality (FormyDuval, Williams, Patterson, & Fogle, 1995; John, 1989). John's (1989) method was used here to score the ACL into the five factors, which were then correlated with CPI 260 scales. The results are presented, by language, in Tables 10–14. The pattern of correlations is consistent across the nine languages. Additionally, the five factors correlate with the CPI 260 scales in expected ways, and previous research has found similar correlations between the five factors and the CPI assessment.

A Hakstian and Farrell study (2001) showed correlations between Openness and several CPI scales, such as Dominance, Capacity for Status, Sociability, Self-acceptance, Empathy, Achievement via Independence, and Creative Temperament. Another study found positive correlations between

Extraversion and Sociability and Creative Temperament; Agreeableness and Socialization; Conscientiousness and Amicability, Socialization, and Well-being; and Openness and Well-being (Johnson, 2000). Finally, McCrae, Costa, & Piedmont (1993) found positive correlations between Extraversion and CPI scales Dominance, Sociability, Self-acceptance and a negative correlation with vector 1; positive correlations between Agreeableness and Dominance and Self-control, and a negative correlation with Independence; positive correlations between Conscientiousness and Self-control, Good Impression, and Achievement via Conformance; positive correlations between Openness and Capacity for Status, Social Presence, Empathy, and Independence; and negative correlations between Neuroticism negative correlated with Independence, Self-control, Good Impression, and Well-being.

**TABLE 10. CORRELATIONS OF CPI 260® SCALES WITH EXTRAVERSION  
(AS MEASURED BY THE ACL) FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
Dominance (Do)	.63	.56	.57	.60	.66	.64	.32	.62	.06
Capacity for Status (Cs)	.56	.47	.44	.46	.55	.49	.29	.51	.02
Sociability (Sy)	.65	.52	.53	.51	.59	.60	.27	.63	.06
Social Presence (Sp)	.56	.40	.40	.46	.49	.50	.25	.51	-.01
Self-acceptance (Sa)	.61	.54	.46	.49	.60	.53	.25	.51	.08
Independence (In)	.52	.44	.36	.48	.43	.51	.24	.50	.07
Empathy (Em)	.43	.36	.42	.39	.45	.40	.25	.46	.01
Responsibility (Re)	.17	.10	.13	.11	.06	.13	.05	-.12	.08
Social Conformity (So)	.07	-.04	.14	.03	.04	.04	.10	.02	.11
Self-control (Sc)	-.32	-.22	-.18	-.19	-.25	-.31	-.06	-.38	.11
Good Impression (Gi)	-.08	-.07	.04	.00	-.03	-.09	.08	-.14	.16
Communality (Cm)	.11	.04	.04	.11	.04	.13	.04	.13	.05
Well-being (Wb)	.36	.17	.23	.19	.24	.26	.16	.20	.08
Tolerance (To)	.21	.13	.12	.02	.05	.04	.08	-.11	.08
Achievement via Conformance (Ac)	.19	.11	.27	.18	.17	.21	.13	.12	.17
Achievement via Independence (Ai)	.24	.14	.13	.19	.10	.17	.16	.06	.08
Conceptual Fluency (Cf)	.37	.31	.29	.34	.34	.31	.18	.20	.18
Insightfulness (Is)	.26	.14	.28	.20	.18	.21	.15	.17	.05
Flexibility (Fx)	.08	.10	-.07	.01	-.05	-.04	.04	-.02	-.10
Sensitivity (Sn)	-.41	-.34	-.32	-.32	-.45	-.33	-.17	-.31	-.04
Managerial Potential (Mp)	.34	.31	.28	.31	.35	.32	.22	.23	.09
Work Orientation (Wo)	.24	.07	.12	.04	.14	.07	.11	-.07	.05
Creative Temperament (Ct)	.35	.35	.27	.31	.23	.29	.19	.32	.12
Leadership (Lp)	.59	.48	.42	.54	.54	.55	.27	.49	.11
Amicability (Ami)	.07	-.02	-.02	-.09	-.04	-.08	.07	-.15	.24
Law Enforcement Orientation (Leo)	.21	.22	.22	.19	.23	.17	.05	.10	-.06
vector 1 (v.1)	-.58	-.48	-.53	-.49	-.55	-.55	-.22	-.58	.09
vector 2 (v.2)	.03	.04	.17	.07	.10	.09	.10	.06	.17
vector 3 (v.3)	.11	.12	.00	.09	.03	.00	.13	-.10	.18

Note: Danish  $n = 301$ , Dutch  $n = 283$ , European Spanish  $n = 213$ , French  $n = 295$ , German  $n = 340$ , Swedish  $n = 261$ , Simplified Chinese  $n = 79$ , Traditional Chinese  $n = 101$ , Latin American Spanish  $n = 181$ .

In the current analyses, Extraversion was associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vector 1. Agreeableness was associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness was associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness

was associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally, Neuroticism was associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

**TABLE 11. CORRELATIONS OF CPI 260® SCALES WITH AGREEABLENESS  
(AS MEASURED BY THE ACL) FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
Dominance (Do)	.18	.00	.20	.22	.04	.19	.16	.23	.13
Capacity for Status (Cs)	.20	.01	.18	.28	.07	.24	.12	.19	.14
Sociability (Sy)	.22	.12	.20	.27	.19	.33	.16	.22	.13
Social Presence (Sp)	.11	.08	.13	.19	.10	.24	.15	.27	.07
Self-acceptance (Sa)	.13	.00	.11	.15	.07	.18	.14	.07	.12
Independence (In)	.07	-.06	.14	.14	-.06	.09	.15	.16	.06
Empathy (Em)	.31	.06	.28	.37	.10	.25	.10	.38	.11
Responsibility (Re)	.13	.03	.19	.30	-.01	.26	.08	.08	.16
Social Conformity (So)	.05	.10	.19	.16	.01	.21	.14	.07	.20
Self-control (Sc)	.07	.14	.07	.11	.06	.09	.03	.02	.16
Good Impression (Gi)	.12	.12	.21	.22	.11	.08	.12	.12	.23
Communality (Cm)	.13	.13	.19	.23	.14	.24	.13	.19	.12
Well-being (Wb)	.15	.10	.19	.24	.04	.19	.20	.22	.07
Tolerance (To)	.27	.08	.14	.22	.00	.19	.09	.08	.18
Achievement via Conformance (Ac)	.14	.07	.22	.26	.12	.28	.19	.07	.22
Achievement via Independence (Ai)	.12	.03	.06	.20	-.04	.14	.13	.04	.18
Conceptual Fluency (Cf)	.13	.03	.11	.28	.03	.19	.17	.05	.21
Insightfulness (Is)	.08	.08	.11	.22	-.06	.14	.18	.08	.15
Flexibility (Fx)	.12	.03	.03	.09	.00	.00	.01	.12	.01
Sensitivity (Sn)	.00	.12	-.07	-.03	.05	.15	-.03	.03	.10
Managerial Potential (Mp)	.12	.03	.16	.26	.00	.23	.15	.09	.19
Work Orientation (Wo)	.19	.07	.23	.27	.03	.20	.15	.11	.22
Creative Temperament (Ct)	.12	-.02	.13	.18	.00	.12	.10	.15	-.01
Leadership (Lp)	.20	.06	.20	.28	.07	.26	.19	.20	.14
Amicability (Ami)	.19	.15	.13	.18	.09	.23	.15	.09	.18
Law Enforcement Orientation (Leo)	.14	.01	.03	.06	.04	.06	.08	-.03	.12
vector 1 (v.1)	-.11	.11	-.12	-.12	.00	-.11	-.04	-.13	.01
vector 2 (v.2)	.03	-.01	.08	.10	-.02	.24	.10	-.05	.13
vector 3 (v.3)	.12	.08	.14	.21	.04	.11	.12	.12	.22

Note: Danish *n* = 301, Dutch *n* = 283, European Spanish *n* = 213, French *n* = 295, German *n* = 340, Swedish *n* = 261, Simplified Chinese *n* = 79, Traditional Chinese *n* = 101, Latin American Spanish *n* = 181.

**TABLE 12. CORRELATIONS OF CPI 260® SCALES WITH CONSCIENTIOUSNESS  
(AS MEASURED BY THE ACL) FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
Dominance (Do)	.18	.23	.27	.35	.24	.17	.14	.24	.13
Capacity for Status (Cs)	.09	.12	.21	.28	.09	.09	.08	.12	.11
Sociability (Sy)	.10	.23	.26	.24	.17	.19	.14	.23	.16
Social Presence (Sp)	-.04	.08	.15	.13	.04	.11	.08	.14	.02
Self-acceptance (Sa)	.09	.15	.21	.25	.20	.11	.15	.13	.11
Independence (In)	.14	.17	.20	.28	.23	.13	.16	.23	.06
Empathy (Em)	.15	.10	.22	.25	.01	.07	.06	.21	.08
Responsibility (Re)	.22	.21	.15	.27	.20	.22	.10	.17	.14
Social Conformity (So)	.22	.17	.17	.18	.24	.25	.13	.09	.16
Self-control (Sc)	.20	.20	.05	.12	.23	.17	.07	-.01	.14
Good Impression (Gi)	.28	.21	.16	.21	.24	.07	.14	.22	.26
Communality (Cm)	.20	.17	.15	.22	.25	.22	.14	.27	.13
Well-being (Wb)	.23	.24	.20	.23	.27	.24	.21	.24	.05
Tolerance (To)	.14	.15	.08	.16	.06	.06	.11	.04	.11
Achievement via Conformance (Ac)	.33	.38	.29	.37	.33	.35	.18	.40	.23
Achievement via Independence (Ai)	.16	.12	.05	.23	.10	.07	.13	.17	.10
Conceptual Fluency (Cf)	.17	.26	.19	.38	.19	.15	.15	.17	.20
Insightfulness (Is)	.17	.20	.11	.20	.12	.06	.14	.17	.03
Flexibility (Fx)	-.20	-.22	-.30	-.21	-.39	-.22	.01	-.23	-.01
Sensitivity (Sn)	-.10	.00	-.22	-.18	-.14	-.02	-.06	-.13	-.02
Managerial Potential (Mp)	.22	.28	.19	.34	.27	.20	.16	.21	.22
Work Orientation (Wo)	.22	.21	.19	.23	.24	.18	.16	.14	.21
Creative Temperament (Ct)	-.11	-.07	-.02	.06	-.13	-.10	.08	.03	-.12
Leadership (Lp)	.23	.28	.28	.40	.35	.21	.17	.32	.15
Amicability (Ami)	.19	.17	.13	.13	.20	.11	.15	-.01	.11
Law Enforcement Orientation (Leo)	.23	.25	.22	.23	.23	.13	.08	.14	.20
vector 1 (v.1)	-.08	-.07	-.23	-.19	-.05	-.09	-.01	-.18	-.05
vector 2 (v.2)	.31	.33	.27	.27	.35	.36	.11	.26	.16
vector 3 (v.3)	.09	.12	.02	.12	.03	.02	.13	.13	.20

Note: Danish  $n = 301$ , Dutch  $n = 283$ , European Spanish  $n = 213$ , French  $n = 295$ , German  $n = 340$ , Swedish  $n = 261$ , Simplified Chinese  $n = 79$ , Traditional Chinese  $n = 101$ , Latin American Spanish  $n = 181$ .

**TABLE 13. CORRELATIONS OF CPI 260® SCALES WITH OPENNESS  
(AS MEASURED BY THE ACL) FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
Dominance (Do)	.42	.39	.37	.40	.50	.43	.23	.45	.12
Capacity for Status (Cs)	.43	.38	.35	.37	.45	.46	.19	.36	.10
Sociability (Sy)	.39	.37	.26	.32	.41	.48	.22	.49	.13
Social Presence (Sp)	.38	.30	.26	.33	.35	.41	.17	.44	.07
Self-acceptance (Sa)	.41	.37	.34	.37	.49	.40	.21	.40	.14
Independence (In)	.38	.33	.25	.34	.39	.39	.20	.40	.11
Empathy (Em)	.42	.29	.36	.34	.40	.40	.19	.43	.11
Responsibility (Re)	.21	.20	.10	.14	.19	.26	.11	-.06	.19
Social Conformity (So)	.02	.02	.04	.01	.11	.12	.12	-.01	.23
Self-control (Sc)	-.19	-.06	-.12	-.13	-.05	-.21	-.01	-.28	.12
Good Impression (Gi)	-.06	-.05	-.02	.03	.01	-.17	.11	-.07	.24
Communality (Cm)	.10	.06	.09	.17	.11	.17	.11	.11	.23
Well-being (Wb)	.19	.13	.13	.12	.27	.16	.19	.14	.14
Tolerance (To)	.16	.10	.03	.03	.08	.10	.10	-.07	.13
Achievement via Conformance (Ac)	.26	.20	.24	.21	.26	.30	.18	.17	.29
Achievement via Independence (Ai)	.29	.18	.15	.21	.25	.29	.18	.22	.12
Conceptual Fluency (Cf)	.36	.36	.24	.31	.41	.38	.20	.25	.21
Insightfulness (Is)	.27	.33	.23	.18	.24	.20	.18	.24	.11
Flexibility (Fx)	.09	.08	-.08	-.04	-.03	.05	.04	.06	-.08
Sensitivity (Sn)	-.24	-.16	-.22	-.18	-.29	-.14	-.08	-.25	.00
Managerial Potential (Mp)	.21	.23	.18	.23	.31	.28	.19	.14	.21
Work Orientation (Wo)	.20	.14	.08	.14	.18	.12	.16	-.04	.30
Creative Temperament (Ct)	.28	.26	.21	.21	.26	.25	.14	.24	-.05
Leadership (Lp)	.39	.39	.30	.35	.49	.36	.22	.38	.15
Amicability (Ami)	.01	.00	-.04	-.05	.07	-.04	.11	-.15	.22
Law Enforcement Orientation (Leo)	.10	.16	.07	.08	.11	.07	.08	.06	.20
vector 1 (v.1)	-.43	-.31	-.38	-.35	-.36	-.41	-.12	-.45	.00
vector 2 (v.2)	.04	.07	.16	.10	.17	.17	.10	.05	.14
vector 3 (v.3)	.12	.08	.02	.03	.09	.06	.13	.04	.17

Note: Danish  $n = 301$ , Dutch  $n = 283$ , European Spanish  $n = 213$ , French  $n = 295$ , German  $n = 340$ , Swedish  $n = 261$ , Simplified Chinese  $n = 79$ , Traditional Chinese  $n = 101$ , Latin American Spanish  $n = 181$ .

**TABLE 14. CORRELATIONS OF CPI 260® SCALES WITH NEUROTICISM  
(AS MEASURED BY THE ACL) FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale	Danish	Dutch	European Spanish	French	German	Swedish	Simplified Chinese	Traditional Chinese	Latin American Spanish
Dominance (Do)	-.28	-.24	-.14	-.30	-.25	-.22	-.14	-.20	.11
Capacity for Status (Cs)	-.23	-.22	-.04	-.27	-.20	-.12	-.08	-.27	.01
Sociability (Sy)	-.19	-.20	-.11	-.31	-.19	-.19	-.10	-.19	.09
Social Presence (Sp)	-.25	-.31	-.05	-.24	-.28	-.22	-.18	-.17	.04
Self-acceptance (Sa)	-.19	-.21	-.12	-.31	-.18	-.18	-.18	-.23	.14
Independence (In)	-.41	-.42	-.17	-.36	-.43	-.32	-.17	-.43	.01
Empathy (Em)	-.16	-.23	-.13	-.25	-.26	-.14	-.11	-.24	.03
Responsibility (Re)	-.22	-.10	-.20	-.06	-.25	-.22	-.08	-.21	.07
Social Conformity (So)	-.41	-.15	-.22	-.37	-.40	-.36	-.18	-.41	.02
Self-control (Sc)	-.20	-.14	-.32	-.20	-.34	-.26	-.09	-.28	-.05
Good Impression (Gi)	-.35	-.22	-.28	-.32	-.37	-.26	-.12	-.40	-.03
Communality (Cm)	-.23	-.10	.01	-.06	-.11	-.25	-.15	-.05	.13
Well-being (Wb)	-.53	-.40	-.23	-.46	-.53	-.47	-.17	-.43	.03
Tolerance (To)	-.31	-.23	-.22	-.32	-.29	-.29	-.06	-.45	.05
Achievement via Conformance (Ac)	-.29	-.10	-.18	-.21	-.28	-.26	-.10	-.30	.09
Achievement via Independence (Ai)	-.26	-.21	-.17	-.35	-.28	-.21	-.09	-.41	.01
Conceptual Fluency (Cf)	-.37	-.29	-.24	-.33	-.40	-.24	-.12	-.41	.03
Insightfulness (Is)	-.36	-.23	-.14	-.35	-.29	-.32	-.15	-.22	-.02
Flexibility (Fx)	-.06	-.14	.03	-.05	.03	-.18	.00	-.09	-.19
Sensitivity (Sn)	.37	.31	.11	.37	.33	.32	.07	.30	-.05
Managerial Potential (Mp)	-.38	-.27	-.24	-.38	-.39	-.31	-.14	-.41	.06
Work Orientation (Wo)	-.44	-.36	-.19	-.34	-.49	-.42	-.12	-.42	-.02
Creative Temperament (Ct)	-.17	-.24	-.10	-.20	-.21	-.21	-.07	-.30	.00
Leadership (Lp)	-.37	-.33	-.28	-.40	-.37	-.35	-.19	-.31	.06
Amicability (Ami)	-.40	-.30	-.29	-.42	-.50	-.38	-.18	-.44	-.05
Law Enforcement Orientation (Leo)	-.24	-.18	-.21	-.24	-.22	-.18	-.13	-.35	.10
vector 1 (v.1)	.08	.07	-.04	.10	-.04	-.03	.05	-.11	-.08
vector 2 (v.2)	-.13	-.02	-.11	-.16	-.27	.00	-.07	-.16	.04
vector 3 (v.3)	-.33	-.27	-.20	-.30	-.35	-.31	-.11	-.50	.00

Note: Danish *n* = 301, Dutch *n* = 283, European Spanish *n* = 213, French *n* = 295, German *n* = 340, Swedish *n* = 261, implied Chinese *n* = 79, Traditional Chinese *n* = 101, Latin American Spanish *n* = 181.

## Organizational Level

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than do lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determination, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). The samples obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into

lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives), and the average CPI 260 scale score was generated. These results are provided in Table 15. The anticipated pattern of elevated scores was found among the higher-level organizational group for each sample. This replication of the pattern typically found in the United States provides additional validity evidence for use of the nine translations of the CPI 260 assessment.

**TABLE 15. U.S. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR EACH LANGUAGE SAMPLE**

CPI 260® Scale	Danish		Dutch		European Spanish	
	Organizational Level		Organizational Level		Organizational Level	
	Supervisor and below (n = 341)	Management and above (n = 156)	Supervisor and below (n = 393)	Management and above (n = 74)	Supervisor and below (n = 350)	Management and above (n = 79)
Dominance (Do)	52.29	55.43	52.87	59.38	51.14	56.33
Capacity for Status (Cs)	50.08	52.46	46.60	52.54	49.47	53.61
Sociability (Sy)	51.28	53.47	49.57	54.01	49.99	53.39
Social Presence (Sp)	49.03	50.63	48.40	52.29	48.32	50.41
Self-acceptance (Sa)	51.33	53.66	49.60	55.86	49.97	53.45
Independence (In)	54.36	57.92	54.50	59.89	52.37	56.83
Empathy (Em)	55.89	58.71	53.14	58.44	54.52	58.46
Responsibility (Re)	50.23	52.45	48.64	50.24	48.47	51.38
Social Conformity (So)	49.23	50.05	49.35	50.01	48.53	50.44
Self-control (Sc)	55.11	54.70	57.71	55.35	51.43	53.74
Good Impression (Gi)	55.63	56.53	56.83	56.81	52.79	55.26
Communality (Cm)	47.17	48.41	46.90	47.68	44.07	46.28
Well-being (Wb)	49.67	50.23	50.40	53.44	43.82	47.05
Tolerance (To)	54.52	54.57	50.22	52.88	47.92	50.55
Achievement via Conformance (Ac)	48.37	50.90	49.26	50.95	49.64	53.78
Achievement via Independence (Ai)	53.55	56.07	51.39	54.33	50.40	53.44
Conceptual Fluency (Cf)	50.45	53.04	48.81	52.21	47.08	51.54
Insightfulness (Is)	52.40	54.67	49.90	52.57	48.93	51.69
Flexibility (Fx)	50.33	50.42	50.17	52.84	45.79	45.17
Sensitivity (Sn)	46.07	45.19	47.86	43.12	47.11	45.71
Managerial Potential (Mp)	56.89	58.58	53.54	58.25	50.09	54.31
Work Orientation (Wo)	50.94	51.42	50.28	52.10	45.44	48.84
Creative Temperament (Ct)	50.95	52.13	48.83	54.51	48.47	51.46
Leadership (Lp)	52.13	55.07	51.45	57.15	49.77	55.07
Amicability (Ami)	53.72	53.20	51.99	53.37	46.86	49.13
Law Enforcement Orientation (Leo)	54.86	55.36	56.49	56.70	51.38	52.83
vector 1 (v.1)	48.76	45.89	50.90	43.56	46.36	44.39
vector 2 (v.2)	50.07	51.50	49.46	49.50	51.82	54.11
vector 3 (v.3)	53.96	54.84	52.77	55.10	47.55	50.77

(cont'd)

**TABLE 15. U.S. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale	French		German		Swedish	
	Organizational Level		Organizational Level		Organizational Level	
	Supervisor and below (n = 358)	Management and above (n = 128)	Supervisor and below (n = 423)	Management and above (n = 91)	Supervisor and below (n = 429)	Management and above (n = 51)
Dominance (Do)	49.68	53.98	51.66	57.37	53.90	60.78
Capacity for Status (Cs)	45.55	50.43	44.75	50.47	50.68	56.91
Sociability (Sy)	48.23	50.89	48.50	51.67	50.79	55.31
Social Presence (Sp)	45.89	47.48	45.65	49.66	51.01	56.30
Self-acceptance (Sa)	46.68	50.35	48.53	54.33	52.33	57.28
Independence (In)	49.26	53.50	51.96	57.09	54.72	61.76
Empathy (Em)	52.62	55.81	49.99	54.82	54.28	59.41
Responsibility (Re)	45.75	49.86	45.66	48.76	47.66	51.05
Social Conformity (So)	46.39	49.92	45.09	45.26	47.34	48.96
Self-control (Sc)	55.76	56.25	55.46	54.06	51.24	50.27
Good Impression (Gi)	53.48	54.13	54.87	54.28	50.46	50.70
Communality (Cm)	41.25	43.48	47.57	46.23	44.18	43.87
Well-being (Wb)	42.94	45.70	45.53	48.87	45.78	49.71
Tolerance (To)	46.12	49.26	46.22	47.23	51.29	54.57
Achievement via Conformance (Ac)	46.84	50.97	47.72	50.66	47.66	49.74
Achievement via Independence (Ai)	47.65	51.97	48.12	51.25	51.79	56.36
Conceptual Fluency (Cf)	45.37	50.55	47.56	51.88	48.77	54.31
Insightfulness (Is)	47.06	50.55	49.72	53.21	49.38	53.64
Flexibility (Fx)	47.88	48.53	45.82	45.65	49.29	50.93
Sensitivity (Sn)	46.20	44.96	47.16	43.64	47.01	41.89
Managerial Potential (Mp)	48.89	53.99	48.44	52.44	53.92	58.59
Work Orientation (Wo)	44.08	46.66	45.95	47.79	48.66	50.45
Creative Temperament (Ct)	47.63	51.22	47.59	51.43	49.90	54.35
Leadership (Lp)	47.65	52.56	48.65	54.89	51.35	57.24
Amicability (Ami)	47.17	48.98	46.37	46.35	49.58	50.19
Law Enforcement Orientation (Leo)	51.35	54.14	54.96	55.09	52.74	52.96
vector 1 (v.1)	50.61	47.29	52.21	44.99	45.36	38.91
vector 2 (v.2)	48.37	50.51	48.09	51.25	49.03	49.70
vector 3 (v.3)	47.75	50.33	48.39	49.78	52.49	54.62

(cont'd)

**TABLE 15. U.S. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale	Simplified Chinese		Traditional Chinese		Simplified Chinese (subsample)	
	Organizational Level		Organizational Level		Organizational Level	
	Supervisor and below (n = 213)	Management and above (n = 73)	Supervisor and below (n = 491)	Management and above (n = 157)	Supervisor and below (n = 173)	Management and above (n = 52)
Dominance (Do)	50.79	55.19	48.55	52.70	51.45	56.16
Capacity for Status (Cs)	48.14	51.36	47.08	50.09	48.15	52.60
Sociability (Sy)	49.36	53.16	45.96	49.73	50.07	54.31
Social Presence (Sp)	47.48	50.65	44.42	45.89	48.33	52.01
Self-acceptance (Sa)	49.30	52.87	46.99	50.22	49.98	54.01
Independence (In)	50.57	53.13	47.60	50.17	52.01	56.18
Empathy (Em)	52.39	55.26	50.36	53.37	52.24	55.22
Responsibility (Re)	45.43	45.88	42.22	43.97	46.78	48.48
Social Conformity (So)	44.08	44.27	42.73	43.33	45.96	47.34
Self-control (Sc)	47.67	46.12	50.17	50.21	48.39	47.49
Good Impression (Gi)	50.91	51.85	51.51	52.56	51.43	52.60
Communality (Cm)	37.79	36.23	31.75	31.54	42.51	41.89
Well-being (Wb)	40.08	41.51	38.07	39.38	42.35	45.04
Tolerance (To)	44.26	43.87	45.16	45.53	45.18	46.52
Achievement via Conformance (Ac)	47.74	49.13	46.52	48.50	49.40	51.94
Achievement via Independence (Ai)	46.87	46.71	44.93	46.24	47.88	49.41
Conceptual Fluency (Cf)	46.70	47.25	44.02	46.11	48.00	50.15
Insightfulness (Is)	47.98	48.19	46.13	48.15	49.10	50.75
Flexibility (Fx)	41.68	40.31	44.41	43.06	41.60	41.25
Sensitivity (Sn)	47.00	45.78	48.28	45.32	46.89	45.59
Managerial Potential (Mp)	47.60	50.37	47.39	50.28	48.23	51.87
Work Orientation (Wo)	42.30	42.86	42.12	42.51	44.22	46.54
Creative Temperament (Ct)	44.25	44.61	44.30	45.28	44.97	47.08
Leadership (Lp)	48.35	51.47	45.28	49.39	49.60	53.88
Amicability (Ami)	44.58	44.55	43.64	43.16	45.96	47.08
Law Enforcement Orientation (Leo)	50.49	50.07	48.43	50.02	51.95	52.71
vector 1 (v.1)	43.17	37.46	47.13	43.07	43.87	39.61
vector 2 (v.2)	54.09	57.01	48.86	52.06	54.40	55.98
vector 3 (v.3)	41.90	41.64	43.81	44.36	42.50	42.93

(cont'd)

**TABLE 15. U.S. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR EACH LANGUAGE SAMPLE *CONT'D***

CPI 260® Scale	Traditional Chinese (subsample)		Latin American Spanish	
	Organizational Level		Organizational Level	
	Supervisor and below ( <i>n</i> = 349)	Management and above ( <i>n</i> = 109)	Supervisor and below ( <i>n</i> = 147)	Management and above ( <i>n</i> = 111)
Dominance (Do)	48.70	54.07	57.36	61.61
Capacity for Status (Cs)	47.08	50.86	54.60	58.57
Sociability (Sy)	46.30	51.48	55.21	58.05
Social Presence (Sp)	45.67	47.50	52.51	53.65
Self-acceptance (Sa)	47.11	51.60	56.25	59.29
Independence (In)	48.56	52.25	56.93	61.07
Empathy (Em)	49.86	53.73	57.40	60.69
Responsibility (Re)	44.04	45.80	50.09	53.32
Social Conformity (So)	44.97	45.59	48.91	51.64
Self-control (Sc)	51.57	51.19	49.18	51.40
Good Impression (Gi)	51.93	53.43	52.70	54.81
Communality (Cm)	38.68	38.86	44.52	46.02
Well-being (Wb)	40.53	41.94	47.79	51.31
Tolerance (To)	46.11	46.41	50.10	52.11
Achievement via Conformance (Ac)	48.73	51.00	52.23	55.38
Achievement via Independence (Ai)	45.70	47.69	50.57	53.71
Conceptual Fluency (Cf)	45.55	48.03	49.89	53.35
Insightfulness (Is)	47.49	49.85	50.33	53.56
Flexibility (Fx)	44.13	42.87	43.63	43.95
Sensitivity (Sn)	48.28	45.10	43.93	42.45
Managerial Potential (Mp)	47.70	50.98	52.83	56.79
Work Orientation (Wo)	44.63	45.13	46.81	49.78
Creative Temperament (Ct)	44.65	46.15	51.99	55.49
Leadership (Lp)	46.40	51.53	55.34	59.86
Amicability (Ami)	45.21	45.17	47.20	49.92
Law Enforcement Orientation (Leo)	49.87	52.13	53.28	55.01
vector 1 (v.1)	48.81	43.64	40.38	38.20
vector 2 (v.2)	49.02	52.84	53.67	55.49
vector 3 (v.3)	43.97	44.62	47.20	50.87

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## CONCLUSION

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The adequacy of nine translations of the CPI 260 assessment—Danish, Dutch, European Spanish, French, German, Swedish, Simplified Chinese, Traditional Chinese, and Latin American Spanish—were examined. Using samples of employed adults, this study shows that the CPI 260 assessment as adapted into these languages shows good measurement properties in terms of the reliability and factor structure of the translated instrument. In addition, initial validity evi-

dence suggests that the translations of the CPI 260 assessment function in each of the nine languages in a manner similar to that found in the original language (U.S. English). While additional research should be completed using a variety of samples, the results presented here suggest that the CPI 260 translations can be used with native language speakers in each of these countries.

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## APPENDIX A: DANISH SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in the Danish language. The sample described here was used to create the standardization formulas for Danish and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the Danish sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in Danish as well as demographic and validity items. The targeted sample was selected to reflect the working population within the Danish culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which Danish is spoken. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal number of

women and men. The data were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents whose invalidity indicators (fake good, fake bad, and random) were within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table A-1. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table A-2 shows the demographic characteristics of the respondents in the Danish sample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

The CPI 260 raw and standard score means and standard deviations for the Danish sample are presented in Table A-3. The standard score means and standard deviations are also shown separately for each gender.

**TABLE A-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE DANISH SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	5	1.0
Fake bad	4	0.8
Random	2	0.4

Note: *N* = 499.

**TABLE A-2. DEMOGRAPHIC CHARACTERISTICS OF THE DANISH SAMPLE**

Demographic Characteristic	<i>n</i>	%
Gender		
Men	248	50
Women	249	50
Employment status		
Working full-time	433	87
Working part-time	66	13
Organizational level		
Entry level	59	12
Nonsupervisory	203	41
Supervisory	79	16
Management	91	18
Executive	54	11
Top executive	11	2
Not provided	2	<1
Satisfied with job	487	98
Industry		
Agriculture, forestry, and fishing	7	1
Mining	0	0
Construction	15	3
Manufacturing	57	11
Wholesale trade	14	3
Retail trade	29	6
Finance, insurance, and real estate	18	4
Professional, scientific, and technical services	28	6
Personal care and other services	88	18
Transportation, electric, gas, and sanitary services	36	7
Information systems and technology	34	7
Information, media, and communications	26	5
Other	146	29
	<b>Mean</b>	<b>SD</b>
Age	45.6	11.0
Years working in current occupation	14.7	11.7

Note: *N* = 499. Not all respondents provided answers to all the demographic items.

Internal consistency reliabilities (Cronbach’s coefficient alphas) for the Danish sample are shown in Table A-4. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual* should be kept

in mind: “In regard to reliability as assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demonstrated relation-

**TABLE A-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE DANISH SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	18.93	6.74	53.26	10.31	53.06	10.05	53.52	10.57
Capacity for Status (Cs)	13.53	4.20	50.83	9.28	50.89	9.54	50.77	9.07
Sociability (Sy)	14.59	4.19	51.95	9.42	52.77	9.62	51.12	9.19
Social Presence (Sp)	17.63	4.41	49.51	10.77	49.65	11.36	49.45	10.15
Self-acceptance (Sa)	13.36	4.02	52.07	10.30	52.03	10.59	52.15	10.05
Independence (In)	14.36	4.12	55.48	9.88	54.74	10.24	56.27	9.48
Empathy (Em)	14.07	3.26	56.72	8.86	57.46	8.68	56.01	9.01
Responsibility (Re)	16.00	3.28	50.90	8.40	50.76	8.03	51.05	8.79
Social Conformity (So)	20.22	3.86	49.50	8.76	49.37	8.36	49.66	9.17
Self-control (Sc)	16.49	4.64	55.02	9.18	54.31	8.85	55.71	9.49
Good Impression (Gi)	14.90	4.02	55.94	8.51	55.30	8.07	56.57	8.90
Communality (Cm)	18.68	1.92	47.53	9.02	48.17	8.00	46.90	9.96
Well-being (Wb)	15.07	3.62	49.85	10.36	49.30	10.06	50.44	10.67
Tolerance (To)	13.05	3.72	54.51	9.01	55.36	8.85	53.71	9.11
Achievement via Conformance (Ac)	18.95	3.65	49.16	7.78	49.52	7.79	48.82	7.79
Achievement via Independence (Ai)	15.46	3.83	54.31	8.11	54.79	8.43	53.85	7.73
Conceptual Fluency (Cf)	19.64	4.40	51.23	8.70	51.16	8.61	51.36	8.76
Insightfulness (Is)	13.34	2.91	53.10	8.48	52.97	8.42	53.29	8.53
Flexibility (Fx)	9.55	3.66	50.30	9.92	50.63	9.64	49.99	10.23
Sensitivity (Sn)	12.71	3.12	45.77	7.79	48.05	7.57	43.38	7.23
Managerial Potential (Mp)	16.12	4.27	57.38	9.17	57.62	8.81	57.18	9.50
Work Orientation (Wo)	16.46	3.27	51.08	8.95	50.71	8.93	51.47	8.97
Creative Temperament (Ct)	15.27	4.20	51.29	10.20	51.63	10.16	50.99	10.21
Leadership (Lp)	24.32	6.46	53.05	9.88	52.84	9.90	53.29	9.89
Amicability (Ami)	19.18	4.36	53.55	9.46	53.01	8.89	54.10	9.98
Law Enforcement Orientation (Leo)	17.81	2.96	55.02	9.25	53.99	8.73	56.13	9.47
vector 1 (v.1)	11.04	4.58	47.88	10.54	47.97	10.38	47.76	10.76
vector 2 (v.2)	12.67	3.02	50.52	8.31	49.91	8.15	51.11	8.46
vector 3 (v.3)	17.87	5.67	54.20	9.47	55.22	8.89	53.26	9.91

Note: N = 499.

ships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the Danish sample using the folk scales.

Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor analysis was conducted with a four-factor solution. The results are presented in Table A-5.

**TABLE A-4. CPI 260® SCALE ALPHAS FOR THE DANISH SAMPLE**

CPI 260® Scale	Cronbach's Alpha	CPI 260® Scale	Cronbach's Alpha
Dominance (Do)	.88	Achievement via Independence (Ai)	.73
Capacity for Status (Cs)	.74	Conceptual Fluency (Cf)	.73
Sociability (Sy)	.77	Insightfulness (Is)	.56
Social Presence (Sp)	.74	Flexibility (Fx)	.69
Self-acceptance (Sa)	.74	Sensitivity (Sn)	.47
Independence (In)	.78	Managerial Potential (Mp)	.75
Empathy (Em)	.56	Work Orientation (Wo)	.68
Responsibility (Re)	.64	Creative Temperament (Ct)	.70
Social Conformity (So)	.65	Leadership (Lp)	.86
Self-control (Sc)	.74	Amicability (Ami)	.75
Good Impression (Gi)	.69	Law Enforcement Orientation (Leo)	.35
Communality (Cm)	.41	vector 1 (v.1)	.84
Well-being (Wb)	.78	vector 2 (v.2)	.56
Tolerance (To)	.76	vector 3 (v.3)	.82
Achievement via Conformance (Ac)	.64		

Note: N = 499.

**TABLE A-5. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE DANISH SAMPLE**

CPI 260® Scale	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.89	.04	.21	.22
Capacity for Status (Cs)	.65	.03	.57	.23
Sociability (Sy)	.78	-.04	.33	.27
Social Presence (Sp)	.72	-.07	.52	.07
Self-acceptance (Sa)	.84	-.19	.23	.24
Independence (In)	.79	.21	.30	.17
Empathy (Em)	.47	.03	.65	.23
Responsibility (Re)	.12	.38	.36	.66
Social Conformity (So)	.13	.62	.03	.44
Self-control (Sc)	-.39	.80	-.08	.16
Good Impression (Gi)	-.02	.83	-.04	.15
Communality (Cm)	.17	.21	.01	.62
Well-being (Wb)	.50	.68	.26	.15
Tolerance (To)	.24	.60	.58	.24
Achievement via Conformance (Ac)	.20	.34	.09	.75
Achievement via Independence (Ai)	.26	.31	.72	.31
Conceptual Fluency (Cf)	.49	.34	.50	.44
Insightfulness (Is)	.34	.40	.52	.25
Flexibility (Fx)	-.05	.06	.87	-.09
Sensitivity (Sn)	-.77	-.24	.09	.21
Managerial Potential (Mp)	.52	.52	.41	.30
Work Orientation (Wo)	.31	.66	.39	.34
Creative Temperament (Ct)	.38	.04	.82	.04
Leadership (Lp)	.82	.25	.26	.31
Amicability (Ami)	.09	.83	.31	.18
Law Enforcement Orientation (Leo)	.52	.41	-.29	.15

Note: N = 499.

**TABLE A-6. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE DANISH AND U.S. ENGLISH SAMPLES**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
Danish: Factor 1	<b>.97</b>			
Danish: Factor 2	.26	<b>.98</b>		
Danish: Factor 3	.71	.50	<b>.84</b>	
Danish: Factor 4	.56	.73	.12	<b>.83</b>

To examine precisely the similarity of factor structure of the Danish sample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table A-6. The coefficients of congruence between corresponding factors (in bold) show that factors 1 and 2

are nearly identical, while factors 3 and 4 have high levels of similarity.

Respondents from the Danish sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL adjectives. Selected correlations between these two assessments are shown in Table A-7.

**TABLE A-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE DANISH SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.26	enterprising	.26	active	.20
enterprising	.28	imaginative	.30	enterprising	.26
initiative	.33	interests wide	.30	initiative	.26
outgoing	.25	outgoing	.25	sociable	.19
talkative	.32	talkative	.31	talkative	.40
inhibited	-.22	awkward	-.18	nervous	-.24
retiring	-.41	interests narrow	-.25	reserved	-.24
silent	-.34	silent	-.29	silent	-.34
timid	-.27	timid	-.20	timid	-.25
withdrawn	-.35	withdrawn	-.28	withdrawn	-.35
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.24	ambitious	.23	confident	.29
energetic	.18	assertive	.20	enterprising	.26
outgoing	.22	enterprising	.24	independent	.21
spontaneous	.21	self-confident	.38	initiative	.26
talkative	.25	talkative	.32	resourceful	.24
dull	-.35	anxious	-.26	confused	-.35
fearful	-.18	awkward	-.17	gloomy	-.17
reserved	-.18	timid	-.23	nervous	-.41
silent	-.31	unambitious	-.14	timid	-.35
withdrawn	-.33	withdrawn	-.27	withdrawn	-.34

(cont'd)

**TABLE A-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE DANISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.20	conscientious	.14	optimistic	.13
enterprising	.27	interests wide	.21	patient	.04
interests wide	.32	practical	.17	reasonable	.10
outgoing	.20	rational	.20	relaxed	.11
sociable	.21	responsible	.13	wholesome	.01
distrustful	-.22	coarse	-.12	dissatisfied	-.25
interests narrow	-.23	distrustful	-.26	distrustful	-.30
nervous	-.16	immature	-.15	impulsive	-.19
silent	-.24	interests narrow	-.14	rebellious	-.12
withdrawn	-.22	rattlebrained	-.17	restless	-.23
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	.30	conscientious	.08	capable	.24
modest	.20	patient	.08	civilized	.14
patient	.13	peaceable	.03	cooperative	.11
peaceable	.14	stable	.17	fair-minded	.12
quiet	.24	tactful	.11	reliable	.19
adventurous	-.21	changeable	-.22	dissatisfied	-.15
aggressive	-.29	cynical	-.14	complaining	-.11
impulsive	-.24	impulsive	-.20	self-pitying	-.16
rebellious	-.18	restless	-.20	spineless	-.06
sarcastic	-.19	temperamental	-.25	sour	-.10
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.22	clear-thinking	.12	efficient	.19
cheerful	.15	contented	.28	industrious	.09
clear-thinking	.24	honest	.10	organized	.20
confident	.13	interests wide	.16	planful	.23
efficient	.15	optimistic	.12	thorough	.19
confused	-.36	bitter	-.31	aloof	-.18
dissatisfied	-.40	complaining	-.15	coarse	-.30
moody	-.24	dissatisfied	-.20	disorderly	-.16
nervous	-.36	distrustful	-.30	distractible	-.23
pessimistic	-.24	nervous	-.21	rattlebrained	-.30
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	.32	clear-thinking	.23	alert	.12
clear-thinking	.21	confident	.20	clear-thinking	.22
intelligent	.22	initiative	.19	efficient	.11
interests wide	.25	intelligent	.24	intelligent	.25
rational	.20	interests wide	.32	rational	.23
annoyed	-.29	absent-minded	-.13	anxious	-.31
cowardly	-.22	awkward	-.23	dissatisfied	-.22
distrustful	-.26	confused	-.29	distrustful	-.26
fearful	-.20	fearful	-.22	fearful	-.22
interests narrow	-.17	interests narrow	-.22	interests narrow	-.13

(cont'd)

**TABLE A-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE DANISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.10	anxious	.30	efficient	.18
complicated	.06	fearful	.25	enterprising	.23
imaginative	.07	feminine	.12	initiative	.14
interests wide	.11	inhibited	.17	poised	.20
unconventional	.13	nervous	.32	self-confident	.26
autocratic	-.02	adventurous	-.18	awkward	-.29
cautious	-.10	arrogant	-.10	interests narrow	-.24
conservative	-.04	assertive	-.10	suspicious	-.31
fearful	-.07	masculine	-.22	timid	-.20
formal	-.04	outspoken	-.12	withdrawn	-.31
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.10	capable	.26	ambitious	.20
reliable	.26	enterprising	.15	enterprising	.33
responsible	.11	independent	.11	forceful	.18
tactful	.23	interests wide	.24	initiative	.30
thorough	.09	original	.17	self-confident	.42
dissatisfied	-.28	anxious	-.22	awkward	-.31
distractible	-.24	cautious	-.22	inhibited	-.23
high-strung	-.31	dull	-.21	silent	-.35
moody	-.20	reserved	-.10	timid	-.28
restless	-.30	touchy	-.14	withdrawn	-.38
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.26	determined	.17		
patient	.12	efficient	.21		
peaceable	.13	organized	.19		
relaxed	.13	painstaking	.21		
wholesome	.08	reasonable	.09		
arrogant	-.15	absent-minded	-.14		
dissatisfied	-.28	changeable	-.09		
headstrong	-.12	confused	-.24		
sarcastic	-.17	disorderly	-.09		
suspicious	-.23	vindictive	-.11		

Note: *n* = 301.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the Danish sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table A-8. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vector 1.

Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally,

**TABLE A-8. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS  
(SCORED THROUGH THE ACL) FOR THE DANISH SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.63	.18	.18	.42	-.28
Capacity for Status (Cs)	.56	.20	.09	.43	-.23
Sociability (Sy)	.65	.22	.10	.39	-.19
Social Presence (Sp)	.56	.11	-.04	.38	-.25
Self-acceptance (Sa)	.61	.13	.09	.41	-.19
Independence (In)	.52	.07	.14	.38	-.41
Empathy (Em)	.43	.31	.15	.42	-.16
Responsibility (Re)	.17	.13	.22	.21	-.22
Social Conformity (So)	.07	.05	.22	.02	-.41
Self-control (Sc)	-.32	.07	.20	-.19	-.20
Good Impression (Gi)	-.08	.12	.28	-.06	-.35
Communality (Cm)	.11	.13	.20	.10	-.23
Well-being (Wb)	.36	.15	.23	.19	-.53
Tolerance (To)	.21	.27	.14	.16	-.31
Achievement via Conformance (Ac)	.19	.14	.33	.26	-.29
Achievement via Independence (Ai)	.24	.12	.16	.29	-.26
Conceptual Fluency (Cf)	.37	.13	.17	.36	-.37
Insightfulness (Is)	.26	.08	.17	.27	-.36
Flexibility (Fx)	.08	.12	-.20	.09	-.06
Sensitivity (Sn)	-.41	.00	-.10	-.24	.37
Managerial Potential (Mp)	.34	.12	.22	.21	-.38
Work Orientation (Wo)	.24	.19	.22	.20	-.44
Creative Temperament (Ct)	.35	.12	-.11	.28	-.17
Leadership (Lp)	.59	.20	.23	.39	-.37
Amicability (Ami)	.07	.19	.19	.01	-.40
Law Enforcement Orientation (Leo)	.21	.14	.23	.10	-.24
vector 1 (v.1)	-.58	-.11	-.08	-.43	.08
vector 2 (v.2)	.03	.03	.31	.04	-.13
vector 3 (v.3)	.11	.12	.09	.12	-.33

Note:  $n = 301$ .

Neuroticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determi-

nation, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the Danish sample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives). These

**TABLE A-9. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE DANISH SAMPLE**

CPI 260® Scale	Organizational Level	
	Supervisor and below (n = 341)	Management and above (n = 156)
Dominance (Do)	52.29	55.43
Capacity for Status (Cs)	50.08	52.46
Sociability (Sy)	51.28	53.47
Social Presence (Sp)	49.03	50.63
Self-acceptance (Sa)	51.33	53.66
Independence (In)	54.36	57.92
Empathy (Em)	55.89	58.71
Responsibility (Re)	50.23	52.45
Social Conformity (So)	49.23	50.05
Self-control (Sc)	55.11	54.70
Good Impression (Gi)	55.63	56.53
Communality (Cm)	47.17	48.41
Well-being (Wb)	49.67	50.23
Tolerance (To)	54.52	54.57
Achievement via Conformance (Ac)	48.37	50.90
Achievement via Independence (Ai)	53.55	56.07
Conceptual Fluency (Cf)	50.45	53.04
Insightfulness (Is)	52.40	54.67
Flexibility (Fx)	50.33	50.42
Sensitivity (Sn)	46.07	45.19
Managerial Potential (Mp)	56.89	58.58
Work Orientation (Wo)	50.94	51.42
Creative Temperament (Ct)	50.95	52.13
Leadership (Lp)	52.13	55.07
Amicability (Ami)	53.72	53.20
Law Enforcement Orientation (Leo)	54.86	55.36
vector 1 (v.1)	48.76	45.89
vector 2 (v.2)	50.07	51.50
vector 3 (v.3)	53.96	54.84

results are provided in Table A-9. The anticipated pattern of elevated scores was found among the higher-level organizational group for the Danish sample. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores are reported in standardized form, based on a sample of 499

individuals, nationally representative of the general Danish population, for people of working age (over 18). In the sample, 50% were women and 50% were men; 87% were currently employed full-time and 13% part-time, with 47% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX B: DUTCH SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in the Dutch language. The sample described here was used to create the standardization formulas for Dutch and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the Dutch sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in Dutch as well as demographic and validity items. The targeted sample was selected to reflect the working population within the Dutch culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which Dutch is spoken. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal number of

women and men. The data were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents who had invalidity indicators (fake good, fake bad, and random) within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table B-1. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table B-2 shows the demographic characteristics of the respondents in the Dutch sample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

The CPI 260 raw and standard score means and standard deviations for the Dutch sample are presented in Table B-3. The standard score means and standard deviations are also shown separately for each gender.

**TABLE B-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE DUTCH SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	8	1.7
Fake bad	5	1.1
Random	3	0.6

Note: *N* = 469.

**TABLE B-2. DEMOGRAPHIC CHARACTERISTICS OF THE DUTCH SAMPLE**

Demographic Characteristic	<i>n</i>	%
<b>Gender</b>		
Men	238	51
Women	231	49
<b>Employment status</b>		
Working full-time	306	65
Working part-time	163	35
<b>Organizational level</b>		
Entry level	20	4
Nonsupervisory	337	72
Supervisory	36	8
Management	48	10
Executive	17	4
Top executive	9	2
Not provided	2	<1
Satisfied with job	436	94
<b>Industry</b>		
Agriculture, forestry, and fishing	1	<1
Mining	0	0
Construction	12	3
Manufacturing	23	5
Wholesale trade	17	4
Retail trade	33	7
Finance, insurance, and real estate	24	4
Professional, scientific, and technical services	42	9
Personal care and other services	121	26
Transportation, electric, gas, and sanitary services	24	5
Information systems and technology	16	3
Information, media, and communications	14	3
Other	144	31
	<b>Mean</b>	<b>SD</b>
Age	45.0	11.1
Years working in current occupation	13.0	11.0

Note: *N* = 469. Not all respondents provided answers to all the demographic items.

Internal consistency reliabilities (Cronbach’s coefficient alphas) for the Dutch sample are shown in Table B-4. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual* should be kept

in mind: “In regard to reliability as assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demonstrated relation-

**TABLE B-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE DUTCH SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	19.35	6.27	53.90	9.59	52.78	9.82	54.99	8.89
Capacity for Status (Cs)	12.04	4.38	47.55	9.68	46.85	9.26	48.23	9.80
Sociability (Sy)	13.84	4.25	50.27	9.56	50.15	10.26	50.39	9.23
Social Presence (Sp)	17.42	3.99	49.00	9.74	48.26	10.00	49.73	9.18
Self-acceptance (Sa)	12.77	3.70	50.57	9.46	49.26	9.66	51.84	9.01
Independence (In)	14.31	3.96	55.36	9.50	53.88	9.59	56.80	8.52
Empathy (Em)	13.07	3.36	53.99	9.14	53.54	8.83	54.43	9.40
Responsibility (Re)	15.21	3.15	48.88	8.08	49.59	7.68	48.20	8.84
Social Conformity (So)	20.20	3.63	49.45	8.25	50.33	8.25	48.59	7.61
Self-control (Sc)	17.68	4.11	57.36	8.13	58.98	7.49	55.78	8.30
Good Impression (Gi)	15.33	3.94	56.84	8.34	58.13	7.26	55.60	8.52
Communality (Cm)	18.56	1.84	46.94	8.64	48.55	7.15	45.37	8.29
Well-being (Wb)	15.43	3.59	50.88	10.26	51.12	9.77	50.64	9.00
Tolerance (To)	11.46	3.64	50.65	8.80	51.52	8.02	49.81	8.62
Achievement via Conformance (Ac)	19.12	3.77	49.53	8.04	50.43	7.48	48.65	8.53
Achievement via Independence (Ai)	14.30	3.90	51.85	8.27	52.15	8.04	51.56	8.07
Conceptual Fluency (Cf)	18.68	4.45	49.34	8.81	48.92	8.53	49.74	8.63
Insightfulness (Is)	12.39	2.70	50.33	7.84	50.04	7.12	50.62	7.91
Flexibility (Fx)	9.67	3.51	50.61	9.52	50.49	8.96	50.73	10.14
Sensitivity (Sn)	13.25	3.53	47.13	8.83	51.07	8.26	43.31	7.38
Managerial Potential (Mp)	14.68	4.15	54.28	8.93	54.14	8.90	54.42	8.39
Work Orientation (Wo)	16.46	3.27	51.08	8.95	50.71	8.93	51.47	8.97
Creative Temperament (Ct)	16.28	3.49	50.59	9.55	51.01	9.25	50.18	8.42
Leadership (Lp)	23.86	6.10	52.35	9.33	51.75	9.49	52.93	8.41
Amicability (Ami)	18.56	4.47	52.21	9.70	53.60	9.19	50.85	9.36
Law Enforcement Orientation (Leo)	18.30	2.89	56.54	9.04	56.50	9.05	56.58	7.80
vector 1 (v.1)	11.86	3.99	49.78	9.19	51.61	9.12	48.00	8.92
vector 2 (v.2)	12.28	3.12	49.44	8.58	49.61	8.42	49.27	8.79
vector 3 (v.3)	17.23	5.29	53.15	8.83	54.35	7.44	51.98	8.95

Note: N = 469.

ships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the Dutch sample using the folk scales.

Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor analysis was conducted with a four-factor solution. The results are presented in Table B-5.

**TABLE B-4. CPI 260® SCALE ALPHAS FOR THE DUTCH SAMPLE**

CPI 260® Scale	Cronbach's Alpha	CPI 260® Scale	Cronbach's Alpha
Dominance (Do)	.86	Achievement via Independence (Ai)	.69
Capacity for Status (Cs)	.75	Conceptual Fluency (Cf)	.73
Sociability (Sy)	.76	Insightfulness (Is)	.41
Social Presence (Sp)	.67	Flexibility (Fx)	.66
Self-acceptance (Sa)	.68	Sensitivity (Sn)	.58
Independence (In)	.76	Managerial Potential (Mp)	.73
Empathy (Em)	.55	Work Orientation (Wo)	.70
Responsibility (Re)	.58	Creative Temperament (Ct)	.70
Social Conformity (So)	.59	Leadership (Lp)	.83
Self-control (Sc)	.69	Amicability (Ami)	.77
Good Impression (Gi)	.68	Law Enforcement Orientation (Leo)	.31
Communality (Cm)	.24	vector 1 (v.1)	.79
Well-being (Wb)	.79	vector 2 (v.2)	.59
Tolerance (To)	.74	vector 3 (v.3)	.79
Achievement via Conformance (Ac)	.65		

Note: N = 469.

**TABLE B-5. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE DUTCH SAMPLE**

CPI 260® Scale	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.93	.08	.12	.18
Capacity for Status (Cs)	.71	.06	.48	.27
Sociability (Sy)	.82	.07	.23	.18
Social Presence (Sp)	.70	.02	.48	-.04
Self-acceptance (Sa)	.89	-.14	.15	.12
Independence (In)	.81	.23	.28	.00
Empathy (Em)	.57	.13	.58	.18
Responsibility (Re)	.16	.47	.19	.68
Social Conformity (So)	.04	.75	.10	.05
Self-control (Sc)	-.25	.81	-.05	.14
Good Impression (Gi)	.01	.80	-.05	.19
Communality (Cm)	.03	.49	.04	.14
Well-being (Wb)	.48	.71	.24	-.16
Tolerance (To)	.19	.62	.58	.11
Achievement via Conformance (Ac)	.30	.54	-.02	.61
Achievement via Independence (Ai)	.26	.40	.70	.30
Conceptual Fluency (Cf)	.57	.36	.44	.39
Insightfulness (Is)	.32	.35	.59	.25
Flexibility (Fx)	.08	.00	.86	-.16
Sensitivity (Sn)	-.74	-.01	-.05	.40
Managerial Potential (Mp)	.53	.57	.33	.19
Work Orientation (Wo)	.28	.74	.39	.15
Creative Temperament (Ct)	.52	.01	.74	.04
Leadership (Lp)	.86	.29	.19	.21
Amicability (Ami)	.11	.86	.30	.05
Law Enforcement Orientation (Leo)	.50	.46	-.26	-.04

Note: N = 469.

**TABLE B-6. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE DUTCH AND U.S. ENGLISH SAMPLES**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
Dutch: Factor 1	<b>.98</b>			
Dutch: Factor 2	.31	<b>.98</b>		
Dutch: Factor 3	.67	.51	<b>.84</b>	
Dutch: Factor 4	.42	.54	.24	<b>.83</b>

To examine precisely the similarity of factor structure of the Dutch sample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used for this analysis was the U.S. normative sample used in the *CPI 260® Manual*. (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table B-6. The coefficients of congruence between corresponding factors (in bold) show that factors 1 and 2 are

nearly identical, while factors 3 and 4 have high levels of similarity.

Respondents from the Dutch sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL adjectives. Selected correlations between these two assessments are shown in Table B-7.

**TABLE B-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE DUTCH SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.26	enterprising	.21	active	.29
enterprising	.27	imaginative	.21	enterprising	.25
initiative	.28	interests wide	.33	initiative	.19
outgoing	.26	outgoing	.24	sociable	.20
talkative	.31	talkative	.24	talkative	.29
inhibited	-.31	awkward	-.15	nervous	-.16
retiring	-.29	interests narrow	-.22	reserved	-.17
silent	-.26	silent	-.23	silent	-.27
timid	-.21	timid	-.15	timid	-.23
withdrawn	-.22	withdrawn	-.15	withdrawn	-.25
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.18	ambitious	.28	confident	.37
energetic	.13	assertive	.30	enterprising	.23
outgoing	.13	enterprising	.21	independent	.22
spontaneous	.16	self-confident	.35	initiative	.22
talkative	.18	talkative	.29	resourceful	.14
dull	-.12	anxious	-.19	confused	-.18
fearful	-.22	awkward	-.15	gloomy	-.22
reserved	-.19	timid	-.18	nervous	-.29
silent	-.22	unambitious	-.21	timid	-.20
withdrawn	-.21	withdrawn	-.23	withdrawn	-.20

(cont'd)

**TABLE B-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE DUTCH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.19	conscientious	.20	optimistic	.04
enterprising	.14	interests wide	.23	patient	.11
interests wide	.20	practical	.13	reasonable	.09
outgoing	.18	rational	.22	relaxed	.06
sociable	.19	responsible	.08	wholesome	.05
distrustful	-.13	coarse	-.13	dissatisfied	-.12
interests narrow	-.20	distrustful	-.12	distrustful	-.13
nervous	-.17	immature	-.14	impulsive	-.17
silent	-.16	interests narrow	-.21	rebellious	-.15
withdrawn	-.16	rattlebrained	-.14	restless	-.16
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	.11	conscientious	.05	capable	.08
modest	.16	patient	.11	civilized	.09
patient	.20	peaceable	.12	cooperative	.14
peaceable	.13	stable	.13	fair-minded	.16
quiet	.09	tactful	.07	reliable	.08
adventurous	-.17	changeable	-.27	dissatisfied	-.16
aggressive	-.09	cynical	-.20	complaining	-.09
impulsive	-.23	impulsive	-.21	self-pitying	-.15
rebellious	-.23	restless	-.17	spineless	-.24
sarcastic	-.20	temperamental	-.19	sour	-.03
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.18	clear-thinking	.13	efficient	.23
cheerful	.19	contented	.22	industrious	.15
clear-thinking	.22	honest	.04	organized	.22
confident	.21	interests wide	.10	planful	.20
efficient	.20	optimistic	.12	thorough	.17
confused	-.24	bitter	-.12	aloof	-.11
dissatisfied	-.28	complaining	-.18	coarse	-.23
moody	-.21	dissatisfied	-.16	disorderly	-.17
nervous	-.25	distrustful	-.19	distractible	-.17
pessimistic	-.19	nervous	-.18	rattlebrained	-.13
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	.36	clear-thinking	.22	alert	.21
clear-thinking	.16	confident	.22	clear-thinking	.15
intelligent	.26	initiative	.16	efficient	.23
interests wide	.22	intelligent	.39	intelligent	.36
rational	.22	interests wide	.29	rational	.20
annoyed	-.14	absent-minded	-.11	anxious	-.11
cowardly	-.07	awkward	-.12	dissatisfied	-.17
distrustful	-.18	confused	-.17	distrustful	-.12
fearful	-.14	fearful	-.18	fearful	-.16
interests narrow	-.19	interests narrow	-.30	interests narrow	-.27

(cont'd)

**TABLE B-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE DUTCH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.06	anxious	.21	efficient	.20
complicated	.02	fearful	.21	enterprising	.16
imaginative	.08	feminine	.32	initiative	.24
interests wide	.13	inhibited	.25	poised	.23
unconventional	.16	nervous	.18	self-confident	.22
autocratic	-.03	adventurous	-.26	awkward	-.17
cautious	-.22	arrogant	-.11	interests narrow	-.18
conservative	-.12	assertive	-.17	suspicious	-.18
fearful	-.14	masculine	-.31	timid	-.18
formal	-.05	outspoken	-.12	withdrawn	-.19
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.18	capable	.27	ambitious	.19
reliable	.08	enterprising	.18	enterprising	.24
responsible	.13	independent	.22	forceful	.28
tactful	.18	interests wide	.22	initiative	.26
thorough	.12	original	.13	self-confident	.34
dissatisfied	-.25	anxious	-.22	awkward	-.27
distractible	-.16	cautious	-.27	inhibited	-.31
high-strung	-.22	dull	-.12	silent	-.22
moody	-.16	reserved	-.18	timid	-.22
restless	-.17	touchy	-.15	withdrawn	-.18
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.31	determined	.14		
patient	.18	efficient	.18		
peaceable	.10	organized	.09		
relaxed	.16	painstaking	.10		
wholesome	.12	reasonable	.11		
arrogant	-.09	absent-minded	-.19		
dissatisfied	-.21	changeable	-.16		
headstrong	-.17	confused	-.18		
sarcastic	-.16	disorderly	-.17		
suspicious	-.23	vindictive	-.05		

Note: *n* = 283.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the Dutch sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table B-8. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vector 1.

Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally,

**TABLE B-8. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS (SCORED THROUGH THE ACL) FOR THE DUTCH SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.56	.00	.23	.39	-.24
Capacity for Status (Cs)	.47	.01	.12	.38	-.22
Sociability (Sy)	.52	.12	.23	.37	-.20
Social Presence (Sp)	.40	.08	.08	.30	-.31
Self-acceptance (Sa)	.54	.00	.15	.37	-.21
Independence (In)	.44	-.06	.17	.33	-.42
Empathy (Em)	.36	.06	.10	.29	-.23
Responsibility (Re)	.10	.03	.21	.20	-.10
Social Conformity (So)	-.04	.10	.17	.02	-.15
Self-control (Sc)	-.22	.14	.20	-.06	-.14
Good Impression (Gi)	-.07	.12	.21	-.05	-.22
Communality (Cm)	.04	.13	.17	.06	-.10
Well-being (Wb)	.17	.10	.24	.13	-.40
Tolerance (To)	.13	.08	.15	.10	-.23
Achievement via Conformance (Ac)	.11	.07	.38	.20	-.10
Achievement via Independence (Ai)	.14	.03	.12	.18	-.21
Conceptual Fluency (Cf)	.31	.03	.26	.36	-.29
Insightfulness (Is)	.14	.08	.20	.33	-.23
Flexibility (Fx)	.10	.03	-.22	.08	-.14
Sensitivity (Sn)	-.34	.12	.00	-.16	.31
Managerial Potential (Mp)	.31	.03	.28	.23	-.27
Work Orientation (Wo)	.07	.07	.21	.14	-.36
Creative Temperament (Ct)	.35	-.02	-.07	.26	-.24
Leadership (Lp)	.48	.06	.28	.39	-.33
Amicability (Ami)	-.02	.15	.17	.00	-.30
Law Enforcement Orientation (Leo)	.22	.01	.25	.16	-.18
vector 1 (v.1)	-.48	.11	-.07	-.31	.07
vector 2 (v.2)	.04	-.01	.33	.07	-.02
vector 3 (v.3)	.12	.08	.12	.08	-.27

Note: n = 283.

Neuroticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than lower level-organizational members. Specifically, higher scores among the scales that relate to “drive, determi-

nation, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the Dutch sample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives). These

**TABLE B-9. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE DUTCH SAMPLE**

CPI 260® Scale	Organizational Level	
	Supervisor and below (n = 393)	Management and above (n = 74)
Dominance (Do)	52.87	59.38
Capacity for Status (Cs)	46.60	52.54
Sociability (Sy)	49.57	54.01
Social Presence (Sp)	48.40	52.29
Self-acceptance (Sa)	49.60	55.86
Independence (In)	54.50	59.89
Empathy (Em)	53.14	58.44
Responsibility (Re)	48.64	50.24
Social Conformity (So)	49.35	50.01
Self-control (Sc)	57.71	55.35
Good Impression (Gi)	56.83	56.81
Communality (Cm)	46.90	47.68
Well-being (Wb)	50.40	53.44
Tolerance (To)	50.22	52.88
Achievement via Conformance (Ac)	49.26	50.95
Achievement via Independence (Ai)	51.39	54.33
Conceptual Fluency (Cf)	48.81	52.21
Insightfulness (Is)	49.90	52.57
Flexibility (Fx)	50.17	52.84
Sensitivity (Sn)	47.86	43.12
Managerial Potential (Mp)	53.54	58.25
Work Orientation (Wo)	50.28	52.10
Creative Temperament (Ct)	48.83	54.51
Leadership (Lp)	51.45	57.15
Amicability (Ami)	51.99	53.37
Law Enforcement Orientation (Leo)	56.49	56.70
vector 1 (v.1)	50.90	43.56
vector 2 (v.2)	49.46	49.50
vector 3 (v.3)	52.77	55.10

results are provided in Table B-9. The anticipated pattern of elevated scores was found among the higher-level organizational group for the Dutch sample. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores are reported in standardized form, based on a sample of 469

individuals, nationally representative of the general Dutch population, for people of working age (over 18). In the sample, 49% were women and 51% were men; 65% were currently employed full-time and 35% part-time, with 24% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX C: EUROPEAN SPANISH SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in the European Spanish language. The sample described here was used to create the standardization formulas for European Spanish and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the European Spanish sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in European Spanish as well as demographic and validity items. The targeted sample was selected to reflect the working population within the European Spanish culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which European Spanish is spoken. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an

approximately equal number of women and men. The data were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents who had invalidity indicators (fake good, fake bad, and random) within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table C-1. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table C-2 shows the demographic characteristics of the respondents in the European Spanish sample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

The CPI 260 raw and standard score means and standard deviations for the European Spanish sample are presented in Table C-3. The standard score means and standard deviations are also shown separately for each gender.

**TABLE C-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE EUROPEAN SPANISH SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	13	2.9
Fake bad	18	4.0
Random	13	2.9

Note: *N* = 431.

**TABLE C-2. DEMOGRAPHIC CHARACTERISTICS OF THE EUROPEAN SPANISH SAMPLE**

Demographic Characteristic	<i>n</i>	%
<b>Gender</b>		
Men	221	51
Women	210	49
<b>Employment status</b>		
Working full-time	375	87
Working part-time	56	13
<b>Organizational level</b>		
Entry level	33	8
Nonsupervisory	190	44
Supervisory	127	30
Management	38	9
Executive	24	6
Top executive	17	4
Not provided	2	<1
Satisfied with job	372	87
<b>Industry</b>		
Agriculture, forestry, and fishing	3	1
Mining	2	<1
Construction	29	7
Manufacturing	15	3
Wholesale trade	15	3
Retail trade	33	8
Finance, insurance, and real estate	19	4
Professional, scientific, and technical services	67	16
Personal care and other services	16	4
Transportation, electric, gas, and sanitary services	27	6
Information systems and technology	36	8
Information, media, and communications	22	5
Other	145	34
	<b>Mean</b>	<b>SD</b>
Age	38.8	9.6
Years working in current occupation	12.9	10.4

Note: *N* = 431. Not all respondents provided answers to all the demographic items.

Internal consistency reliabilities (Cronbach's coefficient alphas) for the European Spanish sample are shown in Table C-4. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual*

should be kept in mind: "In regard to reliability as assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demon-

**TABLE C-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE EUROPEAN SPANISH SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	18.24	6.46	52.20	9.89	51.91	9.56	52.46	10.12
Capacity for Status (Cs)	13.30	4.10	50.33	9.06	50.50	8.70	50.16	9.37
Sociability (Sy)	14.05	4.47	50.73	10.06	51.24	9.39	50.26	10.62
Social Presence (Sp)	17.34	3.89	48.81	9.49	49.41	9.18	48.23	9.73
Self-acceptance (Sa)	12.84	3.60	50.75	9.22	50.81	8.60	50.70	9.71
Independence (In)	13.45	3.97	53.30	9.52	52.99	9.53	53.59	9.49
Empathy (Em)	13.59	3.34	55.41	9.09	55.46	8.57	55.37	9.54
Responsibility (Re)	15.31	3.29	49.14	8.42	49.65	7.91	48.65	8.92
Social Conformity (So)	20.02	4.33	49.04	9.84	49.26	9.72	48.83	9.92
Self-control (Sc)	14.92	4.30	51.90	8.51	51.15	8.23	52.62	8.71
Good Impression (Gi)	13.66	4.24	53.31	8.99	53.02	8.64	53.58	9.26
Communality (Cm)	18.09	2.56	44.74	12.00	45.15	11.15	44.36	12.94
Well-being (Wb)	13.21	3.58	44.54	10.25	44.38	10.05	44.70	10.43
Tolerance (To)	10.56	3.84	48.47	9.30	48.87	8.92	48.09	9.56
Achievement via Conformance (Ac)	19.60	4.24	50.54	9.03	50.94	8.37	50.17	9.59
Achievement via Independence (Ai)	13.91	3.69	51.03	7.81	51.45	7.30	50.62	8.26
Conceptual Fluency (Cf)	18.00	4.31	47.98	8.53	47.90	8.04	48.07	8.96
Insightfulness (Is)	12.12	3.14	49.52	9.15	50.26	8.93	48.82	9.28
Flexibility (Fx)	7.87	3.58	45.75	9.70	47.64	9.51	43.94	9.50
Sensitivity (Sn)	11.50	2.79	47.29	7.35	50.27	6.80	44.45	7.15
Managerial Potential (Mp)	13.13	3.91	50.95	8.41	50.57	7.91	51.31	8.85
Work Orientation (Wo)	14.67	3.64	46.17	9.96	45.87	9.52	46.47	10.28
Creative Temperament (Ct)	14.38	3.93	49.13	9.54	49.48	9.48	48.80	9.59
Leadership (Lp)	22.89	6.71	50.86	10.27	50.61	9.88	51.11	10.61
Amicability (Ami)	16.32	4.39	47.36	9.52	47.18	9.39	47.53	9.59
Law Enforcement Orientation (Leo)	16.80	3.20	51.84	10.01	51.36	9.69	52.30	10.26
vector 1 (v.1)	10.26	4.25	46.09	9.77	46.44	9.50	45.75	9.98
vector 2 (v.2)	13.36	3.10	52.41	8.51	51.20	8.31	53.56	8.52
vector 3 (v.3)	14.28	5.54	48.21	9.25	48.70	9.00	47.74	9.42

Note: N = 431.

strated relationships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the European Spanish sample using the

folk scales. Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor analysis was conducted with a four-factor solution. The results are presented in Table C-5.

**TABLE C-4. CPI 260® SCALE ALPHAS FOR THE EUROPEAN SPANISH SAMPLE**

CPI 260® Scale	Cronbach's Alpha	CPI 260® Scale	Cronbach's Alpha
Dominance (Do)	.86	Achievement via Independence (Ai)	.66
Capacity for Status (Cs)	.68	Conceptual Fluency (Cf)	.72
Sociability (Sy)	.79	Insightfulness (Is)	.57
Social Presence (Sp)	.64	Flexibility (Fx)	.69
Self-acceptance (Sa)	.64	Sensitivity (Sn)	.30
Independence (In)	.74	Managerial Potential (Mp)	.68
Empathy (Em)	.54	Work Orientation (Wo)	.70
Responsibility (Re)	.62	Creative Temperament (Ct)	.66
Social Conformity (So)	.72	Leadership (Lp)	.86
Self-control (Sc)	.69	Amicability (Ami)	.74
Good Impression (Gi)	.74	Law Enforcement Orientation (Leo)	.38
Communality (Cm)	.59	vector 1 (v.1)	.79
Well-being (Wb)	.77	vector 2 (v.2)	.61
Tolerance (To)	.74	vector 3 (v.3)	.81
Achievement via Conformance (Ac)	.71		

Note: N = 431.

**TABLE C-5. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE EUROPEAN SPANISH SAMPLE**

CPI 260® Scale	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.93	.12	.00	.11
Capacity for Status (Cs)	.80	.24	.27	.05
Sociability (Sy)	.88	.14	.01	.15
Social Presence (Sp)	.76	-.01	.31	.25
Self-acceptance (Sa)	.87	-.06	-.02	.21
Independence (In)	.75	.33	.14	.27
Empathy (Em)	.72	.25	.29	-.02
Responsibility (Re)	.26	.52	-.02	.60
Social Conformity (So)	.19	.62	-.07	.53
Self-control (Sc)	-.16	.89	-.05	.11
Good Impression (Gi)	.14	.87	-.03	-.07
Communality (Cm)	.07	.13	.01	.88
Well-being (Wb)	.43	.64	.11	.39
Tolerance (To)	.24	.75	.37	.19
Achievement via Conformance (Ac)	.41	.49	-.12	.55
Achievement via Independence (Ai)	.47	.52	.45	.32
Conceptual Fluency (Cf)	.63	.44	.17	.36
Insightfulness (Is)	.42	.48	.36	.35
Flexibility (Fx)	.02	.09	.87	-.12
Sensitivity (Sn)	-.62	-.05	.33	.09
Managerial Potential (Mp)	.63	.60	.15	.06
Work Orientation (Wo)	.32	.72	.15	.37
Creative Temperament (Ct)	.52	.18	.68	.15
Leadership (Lp)	.82	.38	.01	.29
Amicability (Ami)	.12	.86	.17	.21
Law Enforcement Orientation (Leo)	.41	.43	-.40	.25

Note: N = 431.

**TABLE C-6. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE EUROPEAN SPANISH AND U.S. ENGLISH SAMPLES**

Sample: Factor	U.S. English		U.S. English	
	Factor 1	Factor 2	Factor 3	Factor 4
European Spanish: Factor 1	<b>.98</b>			
European Spanish: Factor 2	.39	<b>.99</b>		
European Spanish: Factor 3	.20	.17	<b>.95</b>	
European Spanish: Factor 4	.48	.67	.04	<b>.74</b>

To examine precisely the similarity of factor structure of the European Spanish sample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table C-6. The coefficients of congruence between corresponding factors (in bold) show that fac-

tors 1, 2, and 3 are nearly identical, while factor 4 has a high level of similarity.

Respondents from the European Spanish sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL adjectives. Selected correlations between these two assessments are shown in Table C-7.

**TABLE C-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE EUROPEAN SPANISH SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.19	enterprising	.24	active	.31
enterprising	.22	imaginative	.12	enterprising	.21
initiative	.25	interests wide	.25	initiative	.20
outgoing	.16	outgoing	.07	sociable	.34
talkative	.28	talkative	.23	talkative	.22
inhibited	-.04	awkward	-.11	nervous	-.12
retiring	-.23	interests narrow	-.16	reserved	-.23
silent	-.30	silent	-.25	silent	-.24
timid	.04	timid	-.01	timid	.05
withdrawn	-.10	withdrawn	-.02	withdrawn	-.09
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.24	ambitious	.19	confident	.27
energetic	.22	assertive	.07	enterprising	.12
outgoing	.10	enterprising	.26	independent	.26
spontaneous	.22	self-confident	.34	initiative	.18
talkative	.18	talkative	.26	resourceful	.14
dull	-.07	anxious	-.07	confused	-.20
fearful	-.13	awkward	-.11	gloomy	-.04
reserved	-.15	timid	.07	nervous	-.06
silent	-.18	unambitious	-.05	timid	-.23
withdrawn	-.02	withdrawn	-.07	withdrawn	-.10

(cont'd)

**TABLE C-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE EUROPEAN SPANISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.21	conscientious	.08	optimistic	.04
enterprising	.18	interests wide	.01	patient	.13
interests wide	.25	practical	.08	reasonable	.08
outgoing	.15	rational	.09	relaxed	.00
sociable	.24	responsible	.14	wholesome	.15
distrustful	-.19	coarse	-.16	dissatisfied	-.27
interests narrow	-.11	distrustful	-.22	distrustful	-.22
nervous	-.09	immature	-.09	impulsive	-.15
silent	-.10	interests narrow	-.15	rebellious	-.07
withdrawn	-.09	rattlebrained	-.04	restless	-.15
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	.12	conscientious	.00	capable	.08
modest	.07	patient	.17	civilized	.13
patient	.10	peaceable	.00	cooperative	.18
peaceable	-.01	stable	.15	fair-minded	.08
quiet	.05	tactful	.17	reliable	.06
adventurous	-.24	changeable	-.21	dissatisfied	.04
aggressive	-.26	cynical	-.09	complaining	-.10
impulsive	-.22	impulsive	-.14	self-pitying	.04
rebellious	-.13	restless	-.14	spineless	.15
sarcastic	-.03	temperamental	-.13	sour	.00
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.17	clear-thinking	.08	efficient	.08
cheerful	.16	contented	-.03	industrious	.00
clear-thinking	.18	honest	.16	organized	.25
confident	.19	interests wide	-.04	planful	.17
efficient	.07	optimistic	.10	thorough	.24
confused	-.20	bitter	-.19	aloof	-.10
dissatisfied	-.27	complaining	-.11	coarse	-.14
moody	-.11	dissatisfied	-.17	disorderly	-.16
nervous	-.10	distrustful	-.15	distractible	-.18
pessimistic	-.28	nervous	-.10	rattlebrained	-.02
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	.17	clear-thinking	.20	alert	.16
clear-thinking	.05	confident	.20	clear-thinking	.19
intelligent	.16	initiative	.17	efficient	.16
interests wide	.11	intelligent	.15	intelligent	.13
rational	.13	interests wide	.19	rational	.14
annoyed	-.05	absent-minded	-.13	anxious	-.06
cowardly	-.14	awkward	-.16	dissatisfied	-.19
distrustful	-.15	confused	-.21	distrustful	-.20
fearful	-.10	fearful	-.17	fearful	-.11
interests narrow	-.20	interests narrow	-.16	interests narrow	-.12

(cont'd)

**TABLE C-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE EUROPEAN SPANISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.04	anxious	.11	efficient	.11
complicated	.18	fearful	.09	enterprising	.07
imaginative	-.02	feminine	.14	initiative	.04
interests wide	-.07	inhibited	.09	poised	.08
unconventional	.12	nervous	.05	self-confident	.25
autocratic	-.11	adventurous	-.21	awkward	-.13
cautious	-.01	arrogant	-.01	interests narrow	-.13
conservative	-.22	assertive	-.03	suspicious	.02
fearful	.13	masculine	-.14	timid	-.08
formal	-.13	outspoken	-.20	withdrawn	-.10
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.05	capable	.10	ambitious	.10
reliable	.04	enterprising	.05	enterprising	.20
responsible	.16	independent	.19	forceful	.04
tactful	.22	interests wide	.20	initiative	.19
thorough	.20	original	.09	self-confident	.41
dissatisfied	-.17	anxious	-.01	awkward	-.16
distractible	-.12	cautious	-.05	inhibited	-.06
high-strung	-.22	dull	-.18	silent	-.23
moody	-.08	reserved	-.09	timid	-.04
restless	-.07	touchy	-.08	withdrawn	-.14
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.01	determined	.10		
patient	.02	efficient	.10		
peaceable	-.03	organized	.17		
relaxed	.03	painstaking	.05		
wholesome	.18	reasonable	.01		
arrogant	-.01	absent-minded	-.29		
dissatisfied	-.23	changeable	-.15		
headstrong	-.04	confused	-.11		
sarcastic	.01	disorderly	-.12		
suspicious	-.06	vindictive	.04		

Note: *n* = 213.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the European Spanish sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table C-8. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vec-

tor 1. Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally, Neu-

**TABLE C-8. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS  
(SCORED THROUGH THE ACL) FOR THE EUROPEAN SPANISH SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.57	.20	.27	.37	-.14
Capacity for Status (Cs)	.56	.20	.09	.43	-.04
Sociability (Sy)	.53	.20	.26	.26	-.11
Social Presence (Sp)	.40	.13	.15	.26	-.05
Self-acceptance (Sa)	.46	.11	.21	.34	-.12
Independence (In)	.36	.14	.20	.25	-.17
Empathy (Em)	.42	.28	.22	.36	-.13
Responsibility (Re)	.13	.19	.15	.10	-.20
Social Conformity (So)	.14	.19	.17	.04	-.22
Self-control (Sc)	-.18	.07	.05	-.12	-.32
Good Impression (Gi)	.04	.21	.16	-.02	-.28
Communality (Cm)	.04	.19	.15	.09	.01
Well-being (Wb)	.23	.19	.20	.13	-.23
Tolerance (To)	.12	.14	.08	.03	-.22
Achievement via Conformance (Ac)	.27	.22	.29	.24	-.18
Achievement via Independence (Ai)	.13	.06	.05	.15	-.17
Conceptual Fluency (Cf)	.29	.11	.19	.24	-.24
Insightfulness (Is)	.28	.11	.11	.23	-.14
Flexibility (Fx)	-.07	.03	-.30	-.08	.03
Sensitivity (Sn)	-.32	-.07	-.22	-.22	.11
Managerial Potential (Mp)	.28	.16	.19	.18	-.24
Work Orientation (Wo)	.12	.23	.19	.08	-.19
Creative Temperament (Ct)	.27	.13	-.02	.21	-.10
Leadership (Lp)	.42	.20	.28	.30	-.28
Amicability (Ami)	-.02	.13	.13	-.04	-.29
Law Enforcement Orientation (Leo)	.22	.03	.22	.07	-.21
vector 1 (v.1)	-.53	-.12	-.23	-.38	-.04
vector 2 (v.2)	.17	.08	.27	.16	-.11
vector 3 (v.3)	.00	.14	.02	.02	-.20

Note:  $n = 213$ .

roticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determi-

nation, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the European Spanish sample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives). These

**TABLE C-9. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE EUROPEAN SPANISH SAMPLE**

CPI 260® Scale	Organizational Level	
	Supervisor and below (n = 350)	Management and above (n = 79)
Dominance (Do)	51.14	56.33
Capacity for Status (Cs)	49.47	53.61
Sociability (Sy)	49.99	53.39
Social Presence (Sp)	48.32	50.41
Self-acceptance (Sa)	49.97	53.45
Independence (In)	52.37	56.83
Empathy (Em)	54.52	58.46
Responsibility (Re)	48.47	51.38
Social Conformity (So)	48.53	50.44
Self-control (Sc)	51.43	53.74
Good Impression (Gi)	52.79	55.26
Communality (Cm)	44.07	46.28
Well-being (Wb)	43.82	47.05
Tolerance (To)	47.92	50.55
Achievement via Conformance (Ac)	49.64	53.78
Achievement via Independence (Ai)	50.40	53.44
Conceptual Fluency (Cf)	47.08	51.54
Insightfulness (Is)	48.93	51.69
Flexibility (Fx)	45.79	45.17
Sensitivity (Sn)	47.11	45.71
Managerial Potential (Mp)	50.09	54.31
Work Orientation (Wo)	45.44	48.84
Creative Temperament (Ct)	48.47	51.46
Leadership (Lp)	49.77	55.07
Amicability (Ami)	46.86	49.13
Law Enforcement Orientation (Leo)	51.38	52.83
vector 1 (v.1)	46.36	44.39
vector 2 (v.2)	51.82	54.11
vector 3 (v.3)	47.55	50.77

results are provided in Table C-9. The anticipated pattern of elevated scores was found among the higher-level organizational group for the European Spanish sample. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores are reported in standardized form, based on a sample of 431

individuals, nationally representative of the general European Spanish population, for people of working age (over 18). In the sample, 49% were women and 51% were men; 87% were currently employed full-time and 13% part-time, with 49% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX D: FRENCH SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in the French language. The sample described here was used to create the standardization formulas for French and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the French sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in French as well as demographic and validity items. The targeted sample was selected to reflect the working population within the French culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which French is spoken. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal number of

women and men. The data were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents who had invalidity indicators (fake good, fake bad, and random) within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table D-1. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table D-2 shows the demographic characteristics of the respondents in the French sample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

The CPI 260 raw and standard score means and standard deviations for the French sample are presented in Table D-3. The standard score means and standard deviations are also shown separately for each gender.

**TABLE D-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE FRENCH SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	5	1.0
Fake bad	18	3.7
Random	8	1.6

Note: *N* = 490.

**TABLE D-2. DEMOGRAPHIC CHARACTERISTICS OF THE FRENCH SAMPLE**

Demographic Characteristic	<i>n</i>	%
<b>Gender</b>		
Men	242	49
Women	247	50
<b>Employment status</b>		
Working full-time	433	88
Working part-time	57	12
<b>Organizational level</b>		
Entry level	78	16
Nonsupervisory	246	50
Supervisory	34	7
Management	80	16
Executive	31	6
Top executive	17	3
Not provided	4	1
Satisfied with job	414	85
<b>Industry</b>		
Agriculture, forestry, and fishing	8	1.6
Mining	1	<1
Construction	15	3
Manufacturing	45	9
Wholesale trade	18	4
Retail trade	54	11
Finance, insurance, and real estate	30	6
Professional, scientific, and technical services	35	7
Personal care and other services	64	12
Transportation, electric, gas, and sanitary services	22	4
Information systems and technology	12	2
Information, media, and communications	13	3
Other	194	38
	<b>Mean</b>	<b>SD</b>
Age	40.7	11.4
Years working in current occupation	12.8	11.0

Note: *N* = 490. Not all respondents provided answers to all the demographic items.

Internal consistency reliabilities (Cronbach’s coefficient alphas) for the French sample are shown in Table D-4. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual* should be

kept in mind: “In regard to reliability as assessed by the inter-correlation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demonstrated rela-

**TABLE D-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE FRENCH SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	17.29	6.56	50.74	10.04	49.48	9.72	52.10	10.17
Capacity for Status (Cs)	11.69	4.23	46.77	9.35	46.06	9.10	47.56	9.51
Sociability (Sy)	13.21	4.26	48.86	9.60	48.69	9.58	49.07	9.64
Social Presence (Sp)	16.29	4.13	46.23	10.08	45.28	9.95	47.30	10.04
Self-acceptance (Sa)	11.61	3.85	47.59	9.86	46.15	9.44	49.09	10.10
Independence (In)	12.20	4.28	50.29	10.28	48.80	10.29	51.89	9.99
Empathy (Em)	12.84	3.44	53.38	9.36	52.60	9.02	54.24	9.62
Responsibility (Re)	14.40	3.17	46.80	8.11	47.56	7.27	46.05	8.85
Social Conformity (So)	19.24	4.32	47.28	9.80	47.65	9.33	46.93	10.28
Self-control (Sc)	16.91	4.54	55.85	8.98	56.59	8.71	55.06	9.21
Good Impression (Gi)	13.81	4.18	53.63	8.86	53.84	8.65	53.39	9.09
Communality (Cm)	17.45	2.15	41.76	10.09	42.22	9.35	41.28	10.80
Well-being (Wb)	12.87	3.71	43.57	10.60	43.02	10.65	44.20	10.53
Tolerance (To)	9.91	3.39	46.91	8.19	47.18	7.93	46.65	8.48
Achievement via Conformance (Ac)	18.33	3.88	47.85	8.27	48.37	7.70	47.33	8.80
Achievement via Independence (Ai)	12.83	3.59	48.72	7.60	48.11	7.48	49.40	7.66
Conceptual Fluency (Cf)	17.33	4.47	46.66	8.86	46.45	8.45	46.95	9.22
Insightfulness (Is)	11.56	2.80	47.89	8.16	47.36	8.05	48.46	8.25
Flexibility (Fx)	8.70	3.54	47.99	9.60	48.23	9.52	47.80	9.68
Sensitivity (Sn)	12.75	3.40	45.88	8.50	48.22	8.00	43.45	8.31
Managerial Potential (Mp)	12.76	3.88	50.15	8.33	49.32	8.07	51.04	8.51
Work Orientation (Wo)	14.13	3.47	44.68	9.51	44.21	9.29	45.20	9.74
Creative Temperament (Ct)	14.11	4.11	48.47	9.98	47.81	9.79	49.22	10.12
Leadership (Lp)	21.58	6.58	48.85	10.07	47.76	9.93	49.99	10.10
Amicability (Ami)	16.42	4.36	47.58	9.46	47.35	9.16	47.82	9.78
Law Enforcement Orientation (Leo)	16.87	3.05	52.05	9.53	51.55	9.73	52.55	9.34
vector 1 (v.1)	11.83	4.28	49.70	9.84	51.18	9.35	48.12	10.06
vector 2 (v.2)	12.11	3.03	48.99	8.32	48.05	7.97	49.98	8.58
vector 3 (v.3)	14.38	5.19	48.38	8.67	48.69	8.62	48.10	8.72

Note: N = 490.

tionships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the French sample using the folk scales.

Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor analysis was conducted with a four-factor solution. The results are presented in Table D-5.

**TABLE D-4. CPI 260® SCALE ALPHAS FOR THE FRENCH SAMPLE**

CPI 260® Scale	Cronbach's Alpha	CPI 260® Scale	Cronbach's Alpha
Dominance (Do)	.87	Achievement via Independence (Ai)	.63
Capacity for Status (Cs)	.71	Conceptual Fluency (Cf)	.71
Sociability (Sy)	.77	Insightfulness (Is)	.48
Social Presence (Sp)	.67	Flexibility (Fx)	.65
Self-acceptance (Sa)	.71	Sensitivity (Sn)	.52
Independence (In)	.78	Managerial Potential (Mp)	.69
Empathy (Em)	.56	Work Orientation (Wo)	.66
Responsibility (Re)	.58	Creative Temperament (Ct)	.67
Social Conformity (So)	.70	Leadership (Lp)	.85
Self-control (Sc)	.74	Amicability (Ami)	.73
Good Impression (Gi)	.70	Law Enforcement Orientation (Leo)	.33
Communality (Cm)	.40	vector 1 (v.1)	.80
Well-being (Wb)	.76	vector 2 (v.2)	.58
Tolerance (To)	.69	vector 3 (v.3)	.79
Achievement via Conformance (Ac)	.65		

Note: N = 490.

**TABLE D-5. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE FRENCH SAMPLE**

CPI 260® Scale	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.93	.07	-.07	.15
Capacity for Status (Cs)	.80	.12	.32	.25
Sociability (Sy)	.88	.10	.04	.13
Social Presence (Sp)	.81	.05	.31	-.15
Self-acceptance (Sa)	.90	-.03	-.01	.05
Independence (In)	.83	.30	.08	.01
Empathy (Em)	.71	.12	.38	.20
Responsibility (Re)	.09	.40	.04	.77
Social Conformity (So)	.17	.74	-.01	.13
Self-control (Sc)	-.32	.76	-.09	.32
Good Impression (Gi)	-.05	.75	-.09	.33
Communality (Cm)	.12	.37	-.06	.28
Well-being (Wb)	.44	.78	.02	-.09
Tolerance (To)	.21	.73	.36	.20
Achievement via Conformance (Ac)	.34	.43	-.14	.68
Achievement via Independence (Ai)	.44	.48	.43	.28
Conceptual Fluency (Cf)	.65	.45	.19	.35
Insightfulness (Is)	.43	.58	.27	.17
Flexibility (Fx)	.08	.12	.86	-.11
Sensitivity (Sn)	-.68	-.20	.30	.32
Managerial Potential (Mp)	.64	.52	.12	.23
Work Orientation (Wo)	.29	.83	.17	.10
Creative Temperament (Ct)	.59	.18	.64	.04
Leadership (Lp)	.85	.33	-.07	.23
Amicability (Ami)	.08	.90	.17	.07
Law Enforcement Orientation (Leo)	.34	.49	-.46	.05

Note: N = 490.

**TABLE D-6. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE FRENCH AND U.S. ENGLISH SAMPLES**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
French: Factor 1	<b>.99</b>			
French: Factor 2	<b>.39</b>	<b>.99</b>		
French: Factor 3	<b>.35</b>	<b>.21</b>	<b>.97</b>	
French: Factor 4	<b>.34</b>	<b>.64</b>	<b>.13</b>	<b>.85</b>

To examine precisely the similarity of factor structure of the French sample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table D-6. The coefficients of congruence between corresponding factors (in bold) show that factors 1 and 2 are

nearly identical, while factors 3 and 4 have high levels of similarity.

Respondents from the French sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL adjectives. Selected correlations between these two assessments are shown in Table D-7.

**TABLE D-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE FRENCH SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.30	enterprising	.30	active	.25
enterprising	.33	imaginative	.24	enterprising	.26
initiative	.31	interests wide	.27	initiative	.22
outgoing	.18	outgoing	.17	sociable	.22
talkative	.29	talkative	.19	talkative	.23
inhibited	-.12	awkward	-.13	nervous	-.23
retiring	-.41	interests narrow	-.21	reserved	-.28
silent	-.25	silent	-.18	silent	-.23
timid	-.43	timid	-.35	timid	-.38
withdrawn	-.27	withdrawn	-.22	withdrawn	-.25
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.20	ambitious	.31	confident	.28
energetic	.15	assertive	.24	enterprising	.28
outgoing	.14	enterprising	.29	independent	.17
spontaneous	.22	self-confident	.37	initiative	.23
talkative	.19	talkative	.23	resourceful	.18
dull	-.21	anxious	-.23	confused	-.17
fearful	-.17	awkward	-.16	gloomy	-.25
reserved	-.27	timid	-.38	nervous	-.19
silent	-.19	unambitious	-.14	timid	-.34
withdrawn	-.20	withdrawn	-.24	withdrawn	-.21

(cont'd)

**TABLE D-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE FRENCH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.22	conscientious	.30	optimistic	.18
enterprising	.26	interests wide	.16	patient	.07
interests wide	.30	practical	.15	reasonable	.11
outgoing	.18	rational	.16	relaxed	.08
sociable	.23	responsible	.20	wholesome	.22
distrustful	-.16	coarse	-.11	dissatisfied	-.27
interests narrow	-.19	distrustful	-.10	distrustful	-.16
nervous	-.17	immature	-.17	impulsive	-.17
silent	-.17	interests narrow	-.15	rebellious	-.19
withdrawn	-.15	rattlebrained	-.15	restless	-.12
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	.14	conscientious	.26	capable	.17
modest	.17	patient	.08	civilized	.11
patient	.11	peaceable	.14	cooperative	.13
peaceable	.07	stable	.12	fair-minded	.09
quiet	.11	tactful	.12	reliable	.22
adventurous	-.19	changeable	-.15	dissatisfied	-.21
aggressive	-.19	cynical	-.20	complaining	-.06
impulsive	-.24	impulsive	-.20	self-pitying	-.03
rebellious	-.18	restless	-.14	spineless	-.15
sarcastic	-.24	temperamental	-.19	sour	-.01
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.24	clear-thinking	.12	efficient	.22
cheerful	.21	contented	.14	industrious	.08
clear-thinking	.28	honest	.10	organized	.22
confident	.15	interests wide	.15	planful	.18
efficient	.13	optimistic	.22	thorough	.16
confused	-.16	bitter	-.12	aloof	-.18
dissatisfied	-.31	complaining	-.14	coarse	-.10
moody	-.22	dissatisfied	-.18	disorderly	-.15
nervous	-.18	distrustful	-.15	distractible	-.19
pessimistic	-.22	nervous	-.19	rattlebrained	-.15
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	.17	clear-thinking	.26	alert	.24
clear-thinking	.17	confident	.25	clear-thinking	.21
intelligent	.16	initiative	.26	efficient	.15
interests wide	.24	intelligent	.19	intelligent	.14
rational	.17	interests wide	.26	rational	.08
annoyed	-.19	absent-minded	-.21	anxious	-.27
cowardly	-.15	awkward	-.21	dissatisfied	-.23
distrustful	-.14	confused	-.15	distrustful	-.20
fearful	-.17	fearful	-.21	fearful	-.17
interests narrow	-.17	interests narrow	-.30	interests narrow	-.23

(cont'd)

**TABLE D-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE FRENCH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.11	anxious	.34	efficient	.18
complicated	.21	fearful	.16	enterprising	.19
imaginative	.11	feminine	.16	initiative	.24
interests wide	.01	inhibited	.11	poised	.25
unconventional	.19	nervous	.16	self-confident	.29
autocratic	-.04	adventurous	-.27	awkward	-.23
cautious	-.05	arrogant	-.16	interests narrow	-.21
conservative	-.14	assertive	-.22	suspicious	-.16
fearful	-.10	masculine	-.23	timid	-.36
formal	-.09	outspoken	-.17	withdrawn	-.21
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.24	capable	.08	ambitious	.27
reliable	.17	enterprising	.18	enterprising	.35
responsible	.13	independent	.14	forceful	.19
tactful	.16	interests wide	.13	initiative	.30
thorough	.12	original	.17	self-confident	.36
dissatisfied	-.19	anxious	-.22	awkward	-.23
distractible	-.15	cautious	-.09	inhibited	-.13
high-strung	-.16	dull	-.14	silent	-.21
moody	-.16	reserved	-.15	timid	-.42
restless	-.11	touchy	-.17	withdrawn	-.26
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.11	determined	.05		
patient	.09	efficient	.09		
peaceable	.13	organized	.11		
relaxed	.08	painstaking	.15		
wholesome	.18	reasonable	.14		
arrogant	-.12	absent-minded	-.19		
dissatisfied	-.24	changeable	-.16		
headstrong	-.20	confused	-.21		
sarcastic	-.16	disorderly	-.20		
suspicious	-.25	vindictive	-.11		

Note: *n* = 295.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the French sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table D-8. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vector 1.

Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally,

**TABLE D-8. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS  
(SCORED THROUGH THE ACL) FOR THE FRENCH SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.60	.22	.35	.40	-.30
Capacity for Status (Cs)	.46	.28	.28	.37	-.27
Sociability (Sy)	.51	.27	.24	.32	-.31
Social Presence (Sp)	.46	.19	.13	.33	-.24
Self-acceptance (Sa)	.49	.15	.25	.37	-.31
Independence (In)	.48	.14	.28	.34	-.36
Empathy (Em)	.39	.37	.25	.34	-.25
Responsibility (Re)	.11	.30	.27	.14	-.06
Social Conformity (So)	.03	.16	.18	.01	-.37
Self-control (Sc)	-.19	.11	.12	-.13	-.20
Good Impression (Gi)	.00	.22	.21	.03	-.32
Communality (Cm)	.11	.23	.22	.17	-.06
Well-being (Wb)	.19	.24	.23	.12	-.46
Tolerance (To)	.02	.22	.16	.03	-.32
Achievement via Conformance (Ac)	.18	.26	.37	.21	-.21
Achievement via Independence (Ai)	.19	.20	.23	.21	-.35
Conceptual Fluency (Cf)	.34	.28	.38	.31	-.33
Insightfulness (Is)	.20	.22	.20	.18	-.35
Flexibility (Fx)	.01	.09	-.21	-.04	-.05
Sensitivity (Sn)	-.32	-.03	-.18	-.18	.37
Managerial Potential (Mp)	.31	.26	.34	.23	-.38
Work Orientation (Wo)	.04	.27	.23	.14	-.34
Creative Temperament (Ct)	.31	.18	.06	.21	-.20
Leadership (Lp)	.54	.28	.40	.35	-.40
Amicability (Ami)	-.09	.18	.13	-.05	-.42
Law Enforcement Orientation (Leo)	.19	.06	.23	.08	-.24
vector 1 (v.1)	-.49	-.12	-.19	-.35	.10
vector 2 (v.2)	.07	.10	.27	.10	-.16
vector 3 (v.3)	.09	.21	.12	.03	-.30

Note: *n* = 295.

Neuroticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determi-

nation, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the French sample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives). These

**TABLE D-9. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE FRENCH SAMPLE**

CPI 260® Scale	Organizational Level	
	Supervisor and below (n = 358)	Management and above (n = 128)
Dominance (Do)	49.68	53.98
Capacity for Status (Cs)	45.55	50.43
Sociability (Sy)	48.23	50.89
Social Presence (Sp)	45.89	47.48
Self-acceptance (Sa)	46.68	50.35
Independence (In)	49.26	53.50
Empathy (Em)	52.62	55.81
Responsibility (Re)	45.75	49.86
Social Conformity (So)	46.39	49.92
Self-control (Sc)	55.76	56.25
Good Impression (Gi)	53.48	54.13
Communality (Cm)	41.25	43.48
Well-being (Wb)	42.94	45.70
Tolerance (To)	46.12	49.26
Achievement via Conformance (Ac)	46.84	50.97
Achievement via Independence (Ai)	47.65	51.97
Conceptual Fluency (Cf)	45.37	50.55
Insightfulness (Is)	47.06	50.55
Flexibility (Fx)	47.88	48.53
Sensitivity (Sn)	46.20	44.96
Managerial Potential (Mp)	48.89	53.99
Work Orientation (Wo)	44.08	46.66
Creative Temperament (Ct)	47.63	51.22
Leadership (Lp)	47.65	52.56
Amicability (Ami)	47.17	48.98
Law Enforcement Orientation (Leo)	51.35	54.14
vector 1 (v.1)	50.61	47.29
vector 2 (v.2)	48.37	50.51
vector 3 (v.3)	47.75	50.33

results are provided in Table D-9. The anticipated pattern of elevated scores was found among the higher-level organizational group for the French sample. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores are reported in standardized form, based on a sample of 490

individuals, nationally representative of the general French population, for people of working age (over 18). In the sample, 50% were women and 49% were men; 88% were currently employed full-time and 12% part-time, with 32% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX E: GERMAN SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in the German language. The sample described here was used to create the standardization formulas for German and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the German sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in German as well as demographic and validity items. The targeted sample was selected to reflect the working population within the German culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which German is spoken. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal number of

women and men. The data were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents who had invalidity indicators (fake good, fake bad, and random) within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table E-1. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table E-2 shows the demographic characteristics of the respondents in the German sample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

The CPI 260 raw and standard score means and standard deviations for the German sample are presented in Table E-3. The standard score means and standard deviations are also shown separately for each gender.

**TABLE E-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE GERMAN SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	9	1.7
Fake bad	13	2.5
Random	6	1.2

Note: *N* = 518.

**TABLE E-2. DEMOGRAPHIC CHARACTERISTICS OF THE GERMAN SAMPLE**

Demographic Characteristic	<i>n</i>	%
<b>Gender</b>		
Men	258	50
Women	260	50
<b>Employment status</b>		
Working full-time	412	80
Working part-time	106	20
<b>Organizational level</b>		
Entry level	43	8
Nonsupervisory	311	60
Supervisory	69	13
Management	40	8
Executive	19	4
Top executive	32	6
Not provided	4	1
Satisfied with job	465	91
<b>Industry</b>		
Agriculture, forestry, and fishing	2	<1
Mining	0	0
Construction	19	4
Manufacturing	55	11
Wholesale trade	17	3
Retail trade	47	9
Finance, insurance, and real estate	32	6
Professional, scientific, and technical services	25	5
Personal care and other services	56	11
Transportation, electric, gas, and sanitary services	22	4
Information systems and technology	22	4
Information, media, and communications	24	5
Other	195	38
	<b>Mean</b>	<b>SD</b>
Age	43.2	10.9
Years working in current occupation	11.8	10.1

Note: *N* = 518. Not all respondents provided answers to all the demographic items.

Internal consistency reliabilities (Cronbach’s coefficient alphas) for the German sample are shown in Table E-4. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual* should be

kept in mind: “In regard to reliability as assessed by the inter-correlation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demonstrated rela-

**TABLE E-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE GERMAN SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	17.95	6.50	51.76	9.95	50.25	10.18	53.28	9.50
Capacity for Status (Cs)	11.20	3.84	45.70	8.49	44.60	9.03	46.80	7.78
Sociability (Sy)	13.27	4.10	48.98	9.22	48.78	9.72	49.18	8.70
Social Presence (Sp)	16.32	3.96	46.31	9.67	45.22	10.27	47.41	8.91
Self-acceptance (Sa)	12.34	3.96	49.47	10.15	48.32	10.57	50.63	9.59
Independence (In)	13.24	4.25	52.78	10.20	51.21	10.30	54.37	9.88
Empathy (Em)	11.90	3.26	50.81	8.88	50.06	9.07	51.56	8.63
Responsibility (Re)	14.15	3.35	46.16	8.59	45.42	8.34	46.91	8.79
Social Conformity (So)	18.27	4.37	45.07	9.91	44.97	10.03	45.18	9.81
Self-control (Sc)	16.59	4.99	55.21	9.88	56.05	10.06	54.36	9.64
Good Impression (Gi)	14.33	4.49	54.72	9.52	54.86	9.59	54.58	9.48
Communality (Cm)	18.64	2.30	47.31	10.78	47.77	9.62	46.85	11.83
Well-being (Wb)	13.76	3.97	46.11	11.36	45.12	11.28	47.10	11.37
Tolerance (To)	9.70	3.34	46.41	8.07	46.03	8.20	46.78	7.94
Achievement via Conformance (Ac)	18.48	4.20	48.17	8.95	48.06	8.97	48.27	8.95
Achievement via Independence (Ai)	12.79	3.49	48.65	7.41	47.70	7.35	49.61	7.36
Conceptual Fluency (Cf)	18.14	4.59	48.25	9.09	47.14	9.52	49.38	8.50
Insightfulness (Is)	12.39	2.95	50.31	8.60	49.07	8.49	51.55	8.54
Flexibility (Fx)	7.90	3.23	45.83	8.74	45.35	8.23	46.32	9.22
Sensitivity (Sn)	13.04	3.40	46.60	8.50	49.51	8.15	43.67	7.82
Managerial Potential (Mp)	12.27	3.76	49.11	8.08	47.94	8.21	50.28	7.78
Work Orientation (Wo)	14.72	3.50	46.29	9.60	44.71	9.54	47.89	9.41
Creative Temperament (Ct)	14.02	3.68	48.25	8.95	46.93	8.83	49.59	8.90
Leadership (Lp)	22.10	6.67	49.65	10.21	48.28	10.37	51.03	9.87
Amicability (Ami)	15.88	4.49	46.40	9.75	46.00	9.71	46.80	9.79
Law Enforcement Orientation (Leo)	17.78	3.17	54.91	9.91	55.06	9.44	54.77	10.37
vector 1 (v.1)	12.39	4.47	51.00	10.28	52.52	10.31	49.46	10.04
vector 2 (v.2)	11.96	3.34	48.56	9.18	47.57	8.87	49.56	9.38
vector 3 (v.3)	14.53	5.01	48.63	8.36	48.22	8.61	49.05	8.09

Note: N = 518.

tionships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the German sample using the folk scales.

Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor analysis was conducted with a four-factor solution. The results are presented in Table E-5.

**TABLE E-4. CPI 260® SCALE ALPHAS FOR THE GERMAN SAMPLE**

CPI 260® Scale	Cronbach's Alpha	CPI 260® Scale	Cronbach's Alpha
Dominance (Do)	.87	Achievement via Independence (Ai)	.62
Capacity for Status (Cs)	.66	Conceptual Fluency (Cf)	.72
Sociability (Sy)	.75	Insightfulness (Is)	.52
Social Presence (Sp)	.65	Flexibility (Fx)	.60
Self-acceptance (Sa)	.71	Sensitivity (Sn)	.54
Independence (In)	.78	Managerial Potential (Mp)	.67
Empathy (Em)	.50	Work Orientation (Wo)	.69
Responsibility (Re)	.63	Creative Temperament (Ct)	.59
Social Conformity (So)	.68	Leadership (Lp)	.86
Self-control (Sc)	.78	Amicability (Ami)	.77
Good Impression (Gi)	.74	Law Enforcement Orientation (Leo)	.37
Communality (Cm)	.52	vector 1 (v.1)	.83
Well-being (Wb)	.80	vector 2 (v.2)	.64
Tolerance (To)	.68	vector 3 (v.3)	.76
Achievement via Conformance (Ac)	.70		

Note: N = 518.

**TABLE E-5. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE GERMAN SAMPLE**

CPI 260® Scale	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.92	.10	.00	.19
Capacity for Status (Cs)	.74	.01	.34	.40
Sociability (Sy)	.85	.03	.06	.16
Social Presence (Sp)	.79	.09	.32	-.15
Self-acceptance (Sa)	.91	-.06	.03	.13
Independence (In)	.79	.40	.11	.00
Empathy (Em)	.60	.05	.41	.29
Responsibility (Re)	.17	.53	-.01	.64
Social Conformity (So)	.07	.79	-.02	.13
Self-control (Sc)	-.33	.79	-.08	.25
Good Impression (Gi)	-.07	.74	-.06	.33
Communality (Cm)	.31	.52	-.17	-.15
Well-being (Wb)	.47	.79	.09	-.08
Tolerance (To)	.10	.67	.50	.21
Achievement via Conformance (Ac)	.34	.53	-.14	.61
Achievement via Independence (Ai)	.31	.45	.56	.36
Conceptual Fluency (Cf)	.60	.46	.27	.37
Insightfulness (Is)	.42	.47	.39	.14
Flexibility (Fx)	-.10	-.10	.87	-.15
Sensitivity (Sn)	-.73	-.15	.10	.18
Managerial Potential (Mp)	.54	.56	.20	.35
Work Orientation (Wo)	.37	.81	.17	.06
Creative Temperament (Ct)	.49	.05	.72	.02
Leadership (Lp)	.85	.36	.03	.23
Amicability (Ami)	.00	.88	.21	.11
Law Enforcement Orientation (Leo)	.41	.50	-.29	.03

Note: N = 518.

**TABLE E-6. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE GERMAN AND U.S. ENGLISH SAMPLES**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
German: Factor 1	<b>.98</b>			
German: Factor 2	.36	<b>.98</b>		
German: Factor 3	.48	.33	<b>.94</b>	
German: Factor 4	.46	.64	.21	<b>.66</b>

To examine precisely the similarity of factor structure of the German sample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table E-6. The coefficients of congruence between corresponding factors (in bold) show that factors 1 and 2 are

nearly identical, while factor 3 has a high level of similarity and factor 4 is less similar.

Respondents from the German sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL adjectives. Selected correlations between these two assessments are shown in Table E-7.

**TABLE E-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE GERMAN SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.26	enterprising	.26	active	.35
enterprising	.29	imaginative	.34	enterprising	.36
initiative	.35	interests wide	.32	initiative	.27
outgoing	.43	outgoing	.35	sociable	.40
talkative	.31	talkative	.30	talkative	.32
inhibited	-.40	awkward	-.23	nervous	-.21
retiring	-.18	interests narrow	-.17	reserved	-.19
silent	-.23	silent	-.20	silent	-.25
timid	-.47	timid	-.39	timid	-.39
withdrawn	-.30	withdrawn	-.20	withdrawn	-.32
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.32	ambitious	.29	confident	.16
energetic	.19	assertive	.41	enterprising	.15
outgoing	.35	enterprising	.30	independent	.21
spontaneous	.23	self-confident	.46	initiative	.20
talkative	.25	talkative	.30	resourceful	.21
dull	-.26	anxious	-.34	confused	-.21
fearful	-.21	awkward	-.30	gloomy	-.28
reserved	-.17	timid	-.41	nervous	-.29
silent	-.21	unambitious	-.22	timid	-.45
withdrawn	-.26	withdrawn	-.32	withdrawn	-.24

(cont'd)

**TABLE E-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE GERMAN SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.15	conscientious	.13	optimistic	.14
enterprising	.22	interests wide	.22	patient	.18
interests wide	.25	practical	.18	reasonable	.20
outgoing	.29	rational	.23	relaxed	.19
sociable	.30	responsible	.12	wholesome	.16
distrustful	-.19	coarse	-.14	dissatisfied	-.28
interests narrow	-.20	distrustful	-.19	distrustful	-.30
nervous	-.29	immature	-.11	impulsive	-.15
silent	-.13	interests narrow	-.16	rebellious	-.18
withdrawn	-.23	rattlebrained	-.21	restless	-.14
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	.27	conscientious	.19	capable	.15
modest	.09	patient	.23	civilized	.15
patient	.24	peaceable	.08	cooperative	.09
peaceable	.10	stable	.12	fair-minded	.15
quiet	.13	tactful	.11	reliable	.08
adventurous	-.16	changeable	-.25	dissatisfied	-.14
aggressive	-.23	cynical	-.26	complaining	-.12
impulsive	-.19	impulsive	-.18	self-pitying	-.09
rebellious	-.27	restless	-.16	spineless	-.12
sarcastic	-.17	temperamental	-.12	sour	-.08
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.23	clear-thinking	.09	efficient	.12
cheerful	.13	contented	.12	industrious	.20
clear-thinking	.23	honest	.10	organized	.15
confident	.23	interests wide	.12	planful	.23
efficient	.17	optimistic	.12	thorough	.19
confused	-.23	bitter	-.11	aloof	-.14
dissatisfied	-.39	complaining	-.17	coarse	-.18
moody	-.24	dissatisfied	-.20	disorderly	-.19
nervous	-.33	distrustful	-.28	distractible	-.30
pessimistic	-.31	nervous	-.21	rattlebrained	-.17
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	.11	clear-thinking	.22	alert	.14
clear-thinking	.10	confident	.19	clear-thinking	.21
intelligent	.17	initiative	.21	efficient	.13
interests wide	.22	intelligent	.23	intelligent	.18
rational	.20	interests wide	.35	rational	.18
annoyed	-.17	absent-minded	-.24	anxious	-.32
cowardly	-.18	awkward	-.31	dissatisfied	-.24
distrustful	-.25	confused	-.19	distrustful	-.18
fearful	-.15	fearful	-.26	fearful	-.18
interests narrow	-.15	interests narrow	-.22	interests narrow	-.15

(cont'd)

**TABLE E-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE GERMAN SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.17	anxious	.41	efficient	.20
complicated	.11	fearful	.25	enterprising	.19
imaginative	.03	feminine	.12	initiative	.17
interests wide	.03	inhibited	.37	poised	.28
unconventional	.24	nervous	.25	self-confident	.34
autocratic	-.08	adventurous	-.27	awkward	-.29
cautious	-.12	arrogant	-.15	interests narrow	-.15
conservative	-.12	assertive	-.32	suspicious	-.12
fearful	-.01	masculine	-.35	timid	-.33
formal	-.13	outspoken	-.09	withdrawn	-.20
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.22	capable	.15	ambitious	.25
reliable	.07	enterprising	.14	enterprising	.27
responsible	.16	independent	.12	forceful	.28
tactful	.12	interests wide	.27	initiative	.31
thorough	.11	original	.11	self-confident	.45
dissatisfied	-.35	anxious	-.25	awkward	-.42
distractible	-.29	cautious	-.22	inhibited	-.43
high-strung	-.32	dull	-.20	silent	-.18
moody	-.25	reserved	-.12	timid	-.48
restless	-.18	touchy	-.10	withdrawn	-.26
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.25	determined	.19		
patient	.21	efficient	.13		
peaceable	.12	organized	.15		
relaxed	.20	painstaking	.11		
wholesome	.11	reasonable	.14		
arrogant	-.21	absent-minded	-.22		
dissatisfied	-.38	changeable	-.13		
headstrong	-.27	confused	-.18		
sarcastic	-.21	disorderly	-.12		
suspicious	-.15	vindictive	-.12		

Note: *n* = 340.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the German sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table E-8. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vector 1.

Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally,

**TABLE E-8. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS  
(SCORED THROUGH THE ACL) FOR THE GERMAN SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.66	.04	.24	.50	-.25
Capacity for Status (Cs)	.55	.07	.09	.45	-.20
Sociability (Sy)	.59	.19	.17	.41	-.19
Social Presence (Sp)	.49	.10	.04	.35	-.28
Self-acceptance (Sa)	.60	.07	.20	.49	-.18
Independence (In)	.43	-.06	.23	.39	-.43
Empathy (Em)	.45	.10	.01	.40	-.26
Responsibility (Re)	.06	-.01	.20	.19	-.25
Social Conformity (So)	.04	.01	.24	.11	-.40
Self-control (Sc)	-.25	.06	.23	-.05	-.34
Good Impression (Gi)	-.03	.11	.24	.01	-.37
Communality (Cm)	.04	.14	.25	.11	-.11
Well-being (Wb)	.24	.04	.27	.27	-.53
Tolerance (To)	.05	.00	.06	.08	-.29
Achievement via Conformance (Ac)	.17	.12	.33	.26	-.28
Achievement via Independence (Ai)	.10	-.04	.10	.25	-.28
Conceptual Fluency (Cf)	.34	.03	.19	.41	-.40
Insightfulness (Is)	.18	-.06	.12	.24	-.29
Flexibility (Fx)	-.05	.00	-.39	-.03	.03
Sensitivity (Sn)	-.45	.05	-.14	-.29	.33
Managerial Potential (Mp)	.35	.00	.27	.31	-.39
Work Orientation (Wo)	.14	.03	.24	.18	-.49
Creative Temperament (Ct)	.23	.00	-.13	.26	-.21
Leadership (Lp)	.54	.07	.35	.49	-.37
Amicability (Ami)	-.04	.09	.20	.07	-.50
Law Enforcement Orientation (Leo)	.23	.04	.23	.11	-.22
vector 1 (v.1)	-.55	.00	-.05	-.36	-.04
vector 2 (v.2)	.10	-.02	.35	.17	-.27
vector 3 (v.3)	.03	.04	.03	.09	-.35

Note: n = 340.

Neuroticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determi-

nation, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the German sample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives). These results are

**TABLE E-9. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE GERMAN SAMPLE**

CPI 260® Scale	Organizational Level	
	Supervisor and below (n = 423)	Management and above (n = 91)
Dominance (Do)	51.66	57.37
Capacity for Status (Cs)	44.75	50.47
Sociability (Sy)	48.50	51.67
Social Presence (Sp)	45.65	49.66
Self-acceptance (Sa)	48.53	54.33
Independence (In)	51.96	57.09
Empathy (Em)	49.99	54.82
Responsibility (Re)	45.66	48.76
Social Conformity (So)	45.09	45.26
Self-control (Sc)	55.46	54.06
Good Impression (Gi)	54.87	54.28
Communality (Cm)	47.57	46.23
Well-being (Wb)	45.53	48.87
Tolerance (To)	46.22	47.23
Achievement via Conformance (Ac)	47.72	50.66
Achievement via Independence (Ai)	48.12	51.25
Conceptual Fluency (Cf)	47.56	51.88
Insightfulness (Is)	49.72	53.21
Flexibility (Fx)	45.82	45.65
Sensitivity (Sn)	47.16	43.64
Managerial Potential (Mp)	48.44	52.44
Work Orientation (Wo)	45.95	47.79
Creative Temperament (Ct)	47.59	51.43
Leadership (Lp)	48.65	54.89
Amicability (Ami)	46.37	46.35
Law Enforcement Orientation (Leo)	54.96	55.09
vector 1 (v.1)	52.21	44.99
vector 2 (v.2)	48.09	51.25
vector 3 (v.3)	48.39	49.78

Note: N = 518. Not all respondents provided answers to all the demographic items.

provided in Table E-9. The anticipated pattern of elevated scores was found among the higher-level organizational group for the German sample. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores are reported in standardized form, based on a sample of 518 individuals, nationally representative of the general German

population, for people of working age (over 18). In the sample, 50% were women and 50% were men; 80% were currently employed full-time and 20% part-time, with 31% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX F: SWEDISH SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in the Swedish language. The sample described here was used to create the standardization formulas for Swedish and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the Swedish sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in Swedish as well as demographic and validity items. The targeted sample was selected to reflect the working population within the Swedish culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which Swedish is spoken. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal number of

women and men. The data were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents who had invalidity indicators (fake good, fake bad, and random) within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table F-1. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table F-2 shows the demographic characteristics of the respondents in the Swedish sample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

The CPI 260 raw and standard score means and standard deviations for the Swedish sample are presented in Table F-3. The standard score means and standard deviations are also shown separately for each gender.

**TABLE F-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE SWEDISH SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	1	0.2
Fake bad	12	2.5
Random	6	1.2

Note: *N* = 481.

**TABLE F-2. DEMOGRAPHIC CHARACTERISTICS OF THE SWEDISH SAMPLE**

Demographic Characteristic	<i>n</i>	%
<b>Gender</b>		
Men	238	49
Women	243	51
<b>Employment status</b>		
Working full-time	377	78
Working part-time	104	22
<b>Organizational level</b>		
Entry level	23	5
Nonsupervisory	291	60
Supervisory	115	24
Management	33	7
Executive	8	2
Top executive	10	2
Not provided	1	<1
Satisfied with job	5	1
<b>Industry</b>		
Agriculture, forestry, and fishing	0	0
Mining	17	4
Construction	52	11
Manufacturing	9	2
Wholesale trade	25	5
Retail trade	14	3
Finance, insurance, and real estate	52	11
Professional, scientific, and technical services	76	16
Personal care and other services	19	4
Transportation, electric, gas, and sanitary services	26	5
Information systems and technology	35	7
Information, media, and communications	149	31
Other	5	1
	<b>Mean</b>	<b>SD</b>
Age	43.1	10.6
Years working in current occupation	12.5	10.8

Note: *N* = 481. Not all respondents provided answers to all the demographic items.

Internal consistency reliabilities (Cronbach’s coefficient alphas) for the Swedish sample are shown in Table F-4. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual* should be kept

in mind: “In regard to reliability as assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demonstrated relation-

**TABLE F-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE SWEDISH SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	19.83	6.89	54.63	10.55	53.92	10.46	55.35	10.61
Capacity for Status (Cs)	13.77	4.34	51.36	9.60	51.37	10.13	51.36	9.04
Sociability (Sy)	14.29	4.25	51.28	9.56	52.00	9.82	50.54	9.25
Social Presence (Sp)	18.48	4.24	51.58	10.34	51.51	10.88	51.65	9.77
Self-acceptance (Sa)	13.67	4.21	52.86	10.78	52.28	10.88	53.44	10.66
Independence (In)	14.36	4.38	55.47	10.51	54.15	10.60	56.82	10.28
Empathy (Em)	13.37	3.37	54.82	9.16	54.90	9.11	54.73	9.23
Responsibility (Re)	14.88	3.36	48.03	8.61	48.00	8.78	48.07	8.46
Social Conformity (So)	19.33	3.93	47.49	8.91	47.49	8.87	47.48	8.97
Self-control (Sc)	14.54	4.71	51.15	9.33	51.13	9.20	51.18	9.47
Good Impression (Gi)	12.34	4.24	50.51	8.98	50.18	8.80	50.84	9.17
Communality (Cm)	17.96	2.18	44.16	10.22	44.81	8.43	43.50	11.75
Well-being (Wb)	13.79	3.81	46.20	10.89	45.89	10.68	46.52	11.12
Tolerance (To)	11.87	3.76	51.65	9.09	51.88	9.12	51.42	9.07
Achievement via Conformance (Ac)	18.35	3.79	47.89	8.07	48.19	7.53	47.58	8.59
Achievement via Independence (Ai)	14.51	3.90	52.30	8.26	52.21	8.77	52.38	7.73
Conceptual Fluency (Cf)	18.70	4.53	49.37	8.97	49.20	8.77	49.54	9.19
Insightfulness (Is)	12.23	2.93	49.86	8.53	49.51	8.42	50.21	8.65
Flexibility (Fx)	9.25	3.92	49.49	10.61	49.29	10.38	49.71	10.86
Sensitivity (Sn)	12.99	3.57	46.48	8.92	49.79	8.03	43.10	8.51
Managerial Potential (Mp)	14.74	3.97	54.42	8.54	54.06	8.67	54.78	8.41
Work Orientation (Wo)	15.65	3.39	48.85	9.30	48.89	9.20	48.81	9.41
Creative Temperament (Ct)	14.90	4.26	50.38	10.36	50.08	10.57	50.69	10.16
Leadership (Lp)	23.62	6.55	51.98	10.02	51.86	9.80	52.10	10.27
Amicability (Ami)	17.38	4.44	49.66	9.64	49.74	9.36	49.58	9.94
Law Enforcement Orientation (Leo)	17.09	2.90	52.76	9.09	52.56	9.15	52.96	9.04
vector 1 (v.1)	9.65	4.62	44.68	10.63	45.36	10.72	43.98	10.51
vector 2 (v.2)	12.15	3.01	49.08	8.29	49.16	7.86	49.00	8.72
vector 3 (v.3)	16.99	5.62	52.74	9.39	52.93	9.29	52.54	9.51

Note: N = 481.

ships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the Swedish sample using the folk scales.

Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor analysis was conducted with a four-factor solution. The results are presented in Table F-5.

**TABLE F-4. CPI 260® SCALE ALPHAS FOR THE SWEDISH SAMPLE**

CPI 260® Scale	Cronbach's Alpha	CPI 260® Scale	Cronbach's Alpha
Dominance (Do)	.89	Achievement via Independence (Ai)	.70
Capacity for Status (Cs)	.72	Conceptual Fluency (Cf)	.72
Sociability (Sy)	.78	Insightfulness (Is)	.50
Social Presence (Sp)	.70	Flexibility (Fx)	.71
Self-acceptance (Sa)	.74	Sensitivity (Sn)	.57
Independence (In)	.78	Managerial Potential (Mp)	.71
Empathy (Em)	.54	Work Orientation (Wo)	.66
Responsibility (Re)	.63	Creative Temperament (Ct)	.68
Social Conformity (So)	.64	Leadership (Lp)	.85
Self-control (Sc)	.76	Amicability (Ami)	.74
Good Impression (Gi)	.71	Law Enforcement Orientation (Leo)	.33
Communality (Cm)	.45	vector 1 (v.1)	.85
Well-being (Wb)	.77	vector 2 (v.2)	.55
Tolerance (To)	.74	vector 3 (v.3)	.82
Achievement via Conformance (Ac)	.63		

Note: N = 481.

**TABLE F-5. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE SWEDISH SAMPLE**

CPI 260® Scale	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.90	-.04	.17	.24
Capacity for Status (Cs)	.68	-.01	.53	.20
Sociability (Sy)	.81	-.02	.24	.24
Social Presence (Sp)	.76	-.08	.39	.11
Self-acceptance (Sa)	.85	-.18	.19	.18
Independence (In)	.82	.16	.23	.19
Empathy (Em)	.54	.03	.54	.16
Responsibility (Re)	.16	.34	.35	.67
Social Conformity (So)	.13	.63	.05	.44
Self-control (Sc)	-.38	.82	-.01	.13
Good Impression (Gi)	-.10	.84	.05	.04
Communality (Cm)	.15	.19	.01	.69
Well-being (Wb)	.51	.64	.11	.25
Tolerance (To)	.16	.65	.60	.15
Achievement via Conformance (Ac)	.37	.35	.00	.67
Achievement via Independence (Ai)	.34	.33	.74	.21
Conceptual Fluency (Cf)	.58	.30	.47	.37
Insightfulness (Is)	.34	.37	.52	.25
Flexibility (Fx)	-.07	.11	.87	-.12
Sensitivity (Sn)	-.75	-.10	.11	.26
Managerial Potential (Mp)	.55	.51	.41	.23
Work Orientation (Wo)	.28	.71	.32	.32
Creative Temperament (Ct)	.39	.06	.80	.09
Leadership (Lp)	.84	.22	.20	.33
Amicability (Ami)	.00	.86	.27	.17
Law Enforcement Orientation (Leo)	.46	.36	-.25	.10

Note: N = 481.

**TABLE F-6. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE SWEDISH AND U.S. ENGLISH SAMPLES**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
Swedish: Factor 1	<b>.98</b>			
Swedish: Factor 2	.22	<b>.98</b>		
Swedish: Factor 3	.65	.51	<b>.86</b>	
Swedish: Factor 4	.55	.68	.10	<b>.84</b>

To examine precisely the similarity of factor structure of the Swedish sample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table F-6. The coefficients of congruence between corresponding factors (in bold) show that factors 1 and 2 are

nearly identical, while factors 3 and 4 have high levels of similarity.

Respondents from the Swedish sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL. Selected correlations between these two assessments are shown in Table F-7.

**TABLE F-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE SWEDISH SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.22	enterprising	.26	active	.28
enterprising	.35	imaginative	.29	enterprising	.31
Initiative	.36	Interests wide	.40	initiative	.32
outgoing	.43	outgoing	.32	sociable	.38
talkative	.37	talkative	.28	talkative	.35
inhibited	-.10	awkward	-.15	nervous	-.27
retiring	-.22	interests narrow	-.33	reserved	-.23
silent	-.35	silent	-.26	silent	-.34
timid	-.06	timid	-.45	timid	-.04
withdrawn	-.32	withdrawn	-.22	withdrawn	-.30
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.27	ambitious	.16	confident	.36
energetic	.24	assertive	.12	enterprising	.31
outgoing	.36	enterprising	.27	independent	.14
spontaneous	.29	self-confident	.34	initiative	.34
talkative	.28	talkative	.33	resourceful	.19
dull	-.23	anxious	-.40	confused	-.18
fearful	-.09	awkward	-.22	gloomy	-.18
reserved	-.18	timid	-.05	nervous	-.37
silent	-.29	unambitious	-.03	timid	-.13
withdrawn	-.28	withdrawn	-.28	withdrawn	-.25

(cont'd)

**TABLE F-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE SWEDISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.30	conscientious	.14	optimistic	.09
enterprising	.22	interests wide	.23	patient	.20
interests wide	.40	practical	.27	reasonable	.08
outgoing	.32	rational	.15	relaxed	.16
sociable	.31	responsible	.15	wholesome	.08
distrustful	-.11	coarse	-.19	dissatisfied	-.31
interests narrow	-.34	distrustful	-.04	distrustful	-.18
nervous	-.13	immature	-.08	impulsive	-.10
silent	-.21	interests narrow	-.20	rebellious	-.29
withdrawn	-.18	rattlebrained	-.20	restless	-.19
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	.25	conscientious	.13	capable	.28
modest	.06	patient	.02	civilized	.21
patient	.09	peaceable	.01	cooperative	.15
peaceable	.04	stable	.04	fair-minded	.06
quiet	.09	tactful	.03	reliable	.18
adventurous	-.21	changeable	-.15	complaining	-.16
aggressive	-.23	cynical	-.18	dissatisfied	-.09
impulsive	-.23	impulsive	-.19	self-pitying	-.11
rebellious	-.35	restless	-.17	spineless	-.03
sarcastic	-.32	temperamental	-.21	sour	-.03
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.15	clear-thinking	.14	efficient	.22
cheerful	.27	contented	.16	industrious	.22
clear-thinking	.20	honest	.10	organized	.28
confident	.28	interests wide	.21	planful	.24
efficient	.13	optimistic	.01	thorough	.21
confused	-.21	bitter	-.07	aloof	-.07
dissatisfied	-.29	complaining	-.12	coarse	-.24
moody	-.09	dissatisfied	-.14	disorderly	-.11
nervous	-.32	distrustful	-.12	distractible	-.14
pessimistic	-.31	nervous	-.11	rattlebrained	-.18
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	.23	clear-thinking	.20	alert	.03
clear-thinking	.15	confident	.30	clear-thinking	.18
intelligent	.22	initiative	.29	efficient	.03
interests wide	.37	intelligent	.29	intelligent	.17
rational	.11	interests wide	.37	rational	.08
annoyed	-.02	absent-minded	-.19	anxious	-.26
cowardly	-.12	awkward	-.15	dissatisfied	-.15
distrustful	-.09	confused	-.04	distrustful	-.13
fearful	-.08	fearful	-.11	fearful	-.11
interests narrow	-.28	interests narrow	-.32	interests narrow	-.24

(cont'd)

**TABLE F-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE SWEDISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.02	anxious	.36	efficient	.11
complicated	.02	fearful	.15	enterprising	.20
imaginative	-.02	feminine	.26	initiative	.27
interests wide	.21	inhibited	.15	poised	.17
unconventional	.05	nervous	.32	self-confident	.22
autocratic	-.05	adventurous	-.19	awkward	-.15
cautious	-.01	arrogant	-.10	interests narrow	-.29
conservative	-.13	assertive	-.15	suspicious	-.24
fearful	-.10	masculine	-.27	timid	-.13
formal	-.18	outspoken	-.15	withdrawn	-.16
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.08	capable	.17	ambitious	.23
reliable	.14	enterprising	.11	enterprising	.36
responsible	.15	independent	.05	forceful	.23
tactful	.10	interests wide	.27	initiative	.37
thorough	.14	original	.13	self-confident	.31
dissatisfied	-.32	anxious	-.21	awkward	-.23
distractible	-.15	cautious	-.21	inhibited	-.13
high-strung	-.21	dull	-.15	silent	-.34
moody	-.15	reserved	-.21	timid	-.16
restless	-.19	touchy	-.10	withdrawn	-.33
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.16	determined	.12		
patient	.11	efficient	.13		
peaceable	.01	organized	.15		
relaxed	.18	painstaking	.09		
wholesome	.01	reasonable	.12		
arrogant	-.05	absent-minded	-.18		
dissatisfied	-.28	changeable	-.10		
headstrong	-.15	confused	-.10		
sarcastic	-.30	disorderly	-.03		
suspicious	-.30	vindictive	-.13		

Note: *n* = 261.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the Swedish sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table D-8. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vector 1.

Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally,

**TABLE F-8. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS  
(SCORED THROUGH THE ACL) FOR THE SWEDISH SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.64	.19	.17	.43	-.22
Capacity for Status (Cs)	.49	.24	.09	.46	-.12
Sociability (Sy)	.60	.33	.19	.48	-.19
Social Presence (Sp)	.50	.24	.11	.41	-.22
Self-acceptance (Sa)	.53	.18	.11	.40	-.18
Independence (In)	.51	.09	.13	.39	-.32
Empathy (Em)	.40	.25	.07	.40	-.14
Responsibility (Re)	.13	.26	.22	.26	-.22
Social Conformity (So)	.04	.21	.25	.12	-.36
Self-control (Sc)	-.31	.09	.17	-.21	-.26
Good Impression (Gi)	-.09	.08	.07	-.17	-.26
Communality (Cm)	.13	.24	.22	.17	-.25
Well-being (Wb)	.26	.19	.24	.16	-.47
Tolerance (To)	.04	.19	.06	.10	-.29
Achievement via Conformance (Ac)	.21	.28	.35	.30	-.26
Achievement via Independence (Ai)	.17	.14	.07	.29	-.21
Conceptual Fluency (Cf)	.31	.19	.15	.38	-.24
Insightfulness (Is)	.21	.14	.06	.20	-.32
Flexibility (Fx)	-.04	.00	-.22	.05	-.18
Sensitivity (Sn)	-.33	.15	-.02	-.14	.32
Managerial Potential (Mp)	.32	.23	.20	.28	-.31
Work Orientation (Wo)	.07	.20	.18	.12	-.42
Creative Temperament (Ct)	.29	.12	-.10	.25	-.21
Leadership (Lp)	.55	.26	.21	.36	-.35
Amicability (Ami)	-.08	.23	.11	-.04	-.38
Law Enforcement Orientation (Leo)	.17	.06	.13	.07	-.18
vector 1 (v.1)	-.55	-.11	-.09	-.41	-.03
vector 2 (v.2)	.09	.24	.36	.17	.00
vector 3 (v.3)	.00	.11	.02	.06	-.31

Note: *n* = 261.

Neuroticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determi-

nation, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the Swedish sample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives). These

**TABLE F-9. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE SWEDISH SAMPLE**

CPI 260® Scale	Organizational Level	
	Supervisor and below (n = 429)	Management and above (n = 51)
Dominance (Do)	53.90	60.78
Capacity for Status (Cs)	50.68	56.91
Sociability (Sy)	50.79	55.31
Social Presence (Sp)	51.01	56.30
Self-acceptance (Sa)	52.33	57.28
Independence (In)	54.72	61.76
Empathy (Em)	54.28	59.41
Responsibility (Re)	47.66	51.05
Social Conformity (So)	47.34	48.96
Self-control (Sc)	51.24	50.27
Good Impression (Gi)	50.46	50.70
Communality (Cm)	44.18	43.87
Well-being (Wb)	45.78	49.71
Tolerance (To)	51.29	54.57
Achievement via Conformance (Ac)	47.66	49.74
Achievement via Independence (Ai)	51.79	56.36
Conceptual Fluency (Cf)	48.77	54.31
Insightfulness (Is)	49.38	53.64
Flexibility (Fx)	49.29	50.93
Sensitivity (Sn)	47.01	41.89
Managerial Potential (Mp)	53.92	58.59
Work Orientation (Wo)	48.66	50.45
Creative Temperament (Ct)	49.90	54.35
Leadership (Lp)	51.35	57.24
Amicability (Ami)	49.58	50.19
Law Enforcement Orientation (Leo)	52.74	52.96
vector 1 (v.1)	45.36	38.91
vector 2 (v.2)	49.03	49.70
vector 3 (v.3)	52.49	54.62

Note: N = 481. Not all respondents provided answers to all the demographic items.

results are provided in Table F-9. The anticipated pattern of elevated scores was found among the higher-level organizational group for the Swedish sample. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores are reported in standardized form, based on a sample of 481

individuals, nationally representative of the general Swedish population, for people of working age (over 18). In the sample, 51% were women and 49% were men; 78% were currently employed full-time and 22% part-time, with 35% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX G: SIMPLIFIED CHINESE SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in Simplified Chinese. The sample described here was used to create the standardization formulas for Simplified Chinese and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the Simplified Chinese sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in Simplified Chinese as well as demographic and validity items. The targeted sample was selected to reflect the working population within the Chinese culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which Simplified Chinese is used. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal number of women and men. The data

were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents whose invalidity indicators (fake good, fake bad, and random) were within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table G-1. As the fake bad and random indicators in this sample were outside normal ranges, most of the analyses in this appendix were conducted for both the Simplified Chinese sample and a subsample that does not include any cases flagged with an invalidity indicator. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

**TABLE G-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE SIMPLIFIED CHINESE SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	5	1.7
Fake bad	43	15.0
Random	14	4.9

Note: *N* = 286.

Table G-2 shows the demographic characteristics of the respondents in the Simplified Chinese sample and subsample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

**TABLE G-2. DEMOGRAPHIC CHARACTERISTICS OF THE SIMPLIFIED CHINESE SAMPLE AND SUBSAMPLE**

Demographic Characteristic	Simplified Chinese		Simplified Chinese (subsample)	
	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>				
Men	146	51	107	48
Women	140	49	118	52
<b>Employment status</b>				
Working full-time	268	94	210	93
Working part-time	18	6	15	7
<b>Organizational level</b>				
Entry level	20	7	15	7
Nonsupervisory	110	38	92	41
Supervisory	83	29	66	29
Management	42	15	29	13
Executive	25	9	20	9
Top executive	6	2	3	1
Not provided	0	0	0	0
Satisfied with job	235	82	185	82
<b>Industry</b>				
Agriculture, forestry, and fishing	3	1	2	1
Mining	0	0	0	0
Construction	17	6	11	5
Manufacturing	56	20	42	19
Wholesale trade	16	6	12	5
Retail trade	17	6	14	6
Finance, insurance, and real estate	16	6	13	6
Professional, scientific, and technical services	28	10	24	11
Personal care and other services	6	2	5	2
Transportation, electric, gas, and sanitary services	22	8	20	9
Information systems and technology	22	8	14	6
Information, media, and communications	22	8	21	9
Other	59	21	46	20
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
Age	29.5	7.1	29.9	7.2
Years working in current occupation	6.3	6.1	6.3	6.0

Note: Simplified Chinese *N* = 286, Simplified Chinese (subsample) *n* = 225. Not all respondents provided answers to all the demographic items.

The CPI 260 raw and standard score means and standard deviations for the Simplified Chinese sample are presented in Table G-3 and for the subsample in Table G-4. The standard

score means and standard deviations are also shown separately for each gender.

**TABLE G-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE SIMPLIFIED CHINESE SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	18.05	5.86	51.92	8.96	51.56	9.43	52.26	8.51
Capacity for Status (Cs)	12.68	3.66	48.97	8.08	48.88	8.25	49.05	7.95
Sociability (Sy)	13.87	4.13	50.33	9.29	50.42	9.41	50.24	9.20
Social Presence (Sp)	17.13	3.59	48.29	8.77	48.57	8.93	48.02	8.64
Self-acceptance (Sa)	12.63	3.47	50.21	8.89	50.07	9.57	50.35	8.22
Independence (In)	12.59	4.02	51.23	9.65	51.52	9.45	50.94	9.86
Empathy (Em)	12.75	2.79	53.12	7.60	53.07	7.69	53.17	7.55
Responsibility (Re)	13.91	2.93	45.54	7.50	45.61	7.00	45.48	7.96
Social Conformity (So)	17.85	4.28	44.13	9.71	45.37	9.54	42.94	9.76
Self-control (Sc)	12.58	3.95	47.28	7.82	47.62	8.28	46.95	7.36
Good Impression (Gi)	12.64	3.82	51.15	8.11	50.74	8.55	51.54	7.66
Communality (Cm)	16.52	2.82	37.39	13.21	39.47	12.55	35.39	13.55
Well-being (Wb)	11.78	3.57	40.45	10.22	41.14	9.97	39.78	10.44
Tolerance (To)	8.78	3.63	44.16	8.79	44.96	8.62	43.39	8.91
Achievement via Conformance (Ac)	18.44	3.89	48.09	8.30	49.06	7.31	47.16	9.07
Achievement via Independence (Ai)	11.93	3.56	46.83	7.54	47.27	7.31	46.40	7.76
Conceptual Fluency (Cf)	17.42	4.24	46.84	8.40	48.09	8.46	45.63	8.18
Insightfulness (Is)	11.60	2.88	48.04	8.39	48.42	8.63	47.67	8.17
Flexibility (Fx)	6.24	2.80	41.33	7.60	42.50	7.76	40.21	7.30
Sensitivity (Sn)	13.08	2.91	46.69	7.29	48.41	6.98	45.04	7.21
Managerial Potential (Mp)	11.90	3.80	48.31	8.16	48.24	8.19	48.37	8.16
Work Orientation (Wo)	13.31	3.65	42.44	10.01	44.02	9.70	40.93	10.10
Creative Temperament (Ct)	12.41	3.49	44.34	8.49	45.37	8.63	43.36	8.26
Leadership (Lp)	21.77	6.03	49.14	9.23	49.30	9.06	48.99	9.41
Amicability (Ami)	15.04	4.28	44.57	9.28	44.89	9.18	44.27	9.41
Law Enforcement Orientation (Leo)	16.33	2.91	50.38	9.09	50.44	9.64	50.33	8.56
vector 1 (v.1)	8.36	4.19	41.71	9.64	42.93	9.92	40.55	9.25
vector 2 (v.2)	14.24	3.14	54.83	8.63	54.32	8.81	55.33	8.46
vector 3 (v.3)	10.46	4.63	41.84	7.73	42.09	8.06	41.59	7.42

Note: N = 286.

Internal consistency reliabilities (Cronbach's coefficient alphas) for the Simplified Chinese sample and subsample are shown in Table G-5. Most of the alphas for these samples are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from

the *CPI™ Manual* should be kept in mind: "In regard to reliability as assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, inter-item homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items

**TABLE G-4. CPI 260® SCALE RAW AND STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE SIMPLIFIED CHINESE SUBSAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	18.46	6.01	52.54	9.19	51.99	9.70	53.14	8.60
Capacity for Status (Cs)	12.78	3.79	49.18	8.38	48.94	8.53	49.44	8.24
Sociability (Sy)	14.19	4.15	51.05	9.35	50.76	9.71	51.37	8.96
Social Presence (Sp)	17.49	3.66	49.18	8.93	49.22	9.18	49.14	8.69
Self-acceptance (Sa)	12.91	3.49	50.91	8.93	50.37	9.60	51.51	8.13
Independence (In)	13.32	3.78	52.98	9.06	52.92	8.93	53.04	9.24
Empathy (Em)	12.68	2.81	52.93	7.64	52.96	7.84	52.89	7.46
Responsibility (Re)	14.55	2.65	47.18	6.77	46.90	6.32	47.47	7.26
Social Conformity (So)	18.80	3.89	46.28	8.82	47.39	8.48	45.06	9.06
Self-control (Sc)	13.04	3.71	48.18	7.35	48.75	7.74	47.54	6.86
Good Impression (Gi)	12.90	3.61	51.70	7.65	51.69	8.26	51.71	6.96
Communality (Cm)	17.58	1.96	42.37	9.20	43.17	9.05	41.48	9.33
Well-being (Wb)	12.66	3.18	42.97	9.09	43.38	8.64	42.52	9.58
Tolerance (To)	9.32	3.34	45.49	8.08	46.53	7.97	44.34	8.09
Achievement via Conformance (Ac)	19.33	3.19	49.99	6.80	50.54	5.92	49.38	7.65
Achievement via Independence (Ai)	12.60	3.27	48.23	6.93	48.48	6.81	47.96	7.08
Conceptual Fluency (Cf)	18.26	3.93	48.50	7.77	49.64	7.66	47.24	7.74
Insightfulness (Is)	12.10	2.70	49.48	7.87	49.78	7.93	49.16	7.82
Flexibility (Fx)	6.31	2.73	41.52	7.40	42.97	7.37	39.92	7.12
Sensitivity (Sn)	13.04	2.99	46.59	7.47	48.34	7.28	44.65	7.22
Managerial Potential (Mp)	12.26	3.80	49.07	8.17	49.34	8.14	48.78	8.24
Work Orientation (Wo)	14.16	3.24	44.75	8.88	46.12	8.09	43.25	9.49
Creative Temperament (Ct)	12.87	3.26	45.46	7.92	46.47	8.06	44.34	7.65
Leadership (Lp)	22.72	5.91	50.59	9.05	50.58	8.82	50.60	9.33
Amicability (Ami)	15.80	3.97	46.21	8.62	46.66	8.16	45.73	9.12
Law Enforcement Orientation (Leo)	16.89	2.52	52.12	7.88	52.39	8.43	51.83	7.24
vector 1 (v.1)	8.87	4.08	42.89	9.37	44.15	9.74	41.49	8.79
vector 2 (v.2)	14.21	3.06	54.77	8.43	53.99	8.70	55.62	8.07
vector 3 (v.3)	10.92	4.28	42.60	7.15	43.40	7.53	41.72	6.62

Note: n = 225.

solely on their demonstrated relationships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the Simplified Chinese samples using the folk scales. Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor

**TABLE G-5. CPI 260® SCALE ALPHAS FOR THE SIMPLIFIED CHINESE SAMPLE AND SUBSAMPLE**

CPI 260® Scale	Simplified Chinese	Simplified Chinese (subsample)
	Cronbach's Alpha	Cronbach's Alpha
Dominance (Do)	.82	.84
Capacity for Status (Cs)	.61	.65
Sociability (Sy)	.76	.76
Social Presence (Sp)	.55	.58
Self-acceptance (Sa)	.61	.64
Independence (In)	.74	.72
Empathy (Em)	.38	.40
Responsibility (Re)	.54	.48
Social Conformity (So)	.68	.63
Self-control (Sc)	.66	.62
Good Impression (Gi)	.63	.59
Communality (Cm)	.58	.27
Well-being (Wb)	.72	.66
Tolerance (To)	.72	.67
Achievement via Conformance (Ac)	.65	.51
Achievement via Independence (Ai)	.63	.58
Conceptual Fluency (Cf)	.68	.63
Insightfulness (Is)	.49	.45
Flexibility (Fx)	.51	.51
Sensitivity (Sn)	.33	.41
Managerial Potential (Mp)	.68	.69
Work Orientation (Wo)	.67	.59
Creative Temperament (Ct)	.52	.48
Leadership (Lp)	.82	.82
Amicability (Ami)	.73	.69
Law Enforcement Orientation (Leo)	.35	.16
vector 1 (v.1)	.80	.79
vector 2 (v.2)	.65	.64
vector 3 (v.3)	.74	.71

Note: Simplified Chinese  $N = 286$ , Simplified Chinese (subsample)  $n = 225$ .

analysis was conducted with a four-factor solution. The results are presented in Table G-6.

To examine precisely the similarity of factor structure of the Simplified Chinese sample and subsample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used

for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table G-7. The coefficients of congruence between corresponding factors (in bold) show that for both samples, factors 1 and 2 are nearly identical, while factor 3 has a high level of similarity and factor 4 is slightly less similar.

**TABLE G-6. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE SIMPLIFIED CHINESE SAMPLE AND SUBSAMPLE**

CPI 260® Scale	Simplified Chinese				Simplified Chinese (subsample)			
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.90	.11	.03	.23	.92	.10	.01	.17
Capacity for Status (Cs)	.82	.13	.20	.12	.82	.15	.19	.13
Sociability (Sy)	.87	.08	.08	.24	.87	.12	.11	.18
Social Presence (Sp)	.77	-.15	.21	.29	.80	-.11	.21	.17
Self-acceptance (Sa)	.83	-.04	.06	.25	.86	.00	.07	.15
Independence (In)	.65	.33	.20	.44	.75	.31	.13	.25
Empathy (Em)	.73	.11	.19	-.09	.70	.11	.29	-.04
Responsibility (Re)	.10	.34	.07	.74	.09	.32	.02	.71
Social Conformity (So)	.24	.54	.03	.62	.27	.61	-.07	.43
Self-control (Sc)	-.33	.81	.12	.25	-.41	.78	.07	.12
Good Impression (Gi)	.08	.86	-.06	.15	.00	.84	-.05	.09
Communality (Cm)	.06	.13	-.02	.88	.05	.16	-.05	.83
Well-being (Wb)	.36	.59	.08	.53	.41	.69	-.02	.33
Tolerance (To)	.21	.69	.34	.35	.24	.71	.27	.27
Achievement via Conformance (Ac)	.26	.39	-.08	.73	.27	.44	-.07	.64
Achievement via Independence (Ai)	.40	.43	.48	.46	.45	.40	.48	.39
Conceptual Fluency (Cf)	.49	.34	.26	.60	.52	.33	.27	.54
Insightfulness (Is)	.37	.40	.29	.49	.37	.41	.26	.44
Flexibility (Fx)	.00	.09	.90	-.12	.05	.02	.88	-.15
Sensitivity (Sn)	-.59	-.19	.25	.03	-.61	-.09	.34	.04
Managerial Potential (Mp)	.58	.60	.17	.19	.61	.58	.13	.12
Work Orientation (Wo)	.22	.63	.15	.56	.23	.73	.13	.37
Creative Temperament (Ct)	.42	.17	.75	.23	.51	.13	.71	.14
Leadership (Lp)	.77	.31	.08	.45	.82	.33	.06	.33
Amicability (Ami)	.12	.77	.14	.40	.11	.85	.07	.22
Law Enforcement Orientation (Leo)	.27	.41	.02	.46	.33	.29	-.03	.30

Note: Simplified Chinese  $N = 286$ , Simplified Chinese (subsample)  $n = 225$ .

Respondents from the Simplified Chinese sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL adjectives.

Selected correlations between these two assessments are shown in Table G-8. The Simplified Chinese subsample was too small to include in this analysis.

**TABLE G-7. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE SIMPLIFIED CHINESE SAMPLE AND SUBSAMPLE AND THE U.S. ENGLISH SAMPLE**

Sample: Factor	U.S. English Factor 1	U.S. English Factor 2	U.S. English Factor 3	U.S. English Factor 4
Simplified Chinese: Factor 1	.99			
Simplified Chinese: Factor 2	.35	.99		
Simplified Chinese: Factor 3	.44	.38	.84	
Simplified Chinese: Factor 4	.56	.80	.06	.66
Simplified Chinese (subsample): Factor 1	.99			
Simplified Chinese (subsample): Factor 2	.36	.99		
Simplified Chinese (subsample): Factor 3	.42	.28	.89	
Simplified Chinese (subsample): Factor 4	.52	.73	.07	.73

**TABLE G-8. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE SIMPLIFIED CHINESE SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.32	enterprising	.15	active	.22
enterprising	.28	imaginative	.14	enterprising	.23
initiative	.29	interests wide	.24	initiative	.34
outgoing	.33	outgoing	.33	sociable	.27
talkative	.16	talkative	.11	talkative	.11
inhibited	-.38	awkward	-.24	nervous	-.24
retiring	-.11	interests narrow	-.26	reserved	-.14
silent	-.30	silent	-.37	silent	-.34
timid	-.37	timid	-.21	timid	-.32
withdrawn	-.46	withdrawn	-.43	withdrawn	-.34
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.26	ambitious	.20	confident	.42
energetic	.21	assertive	.16	enterprising	.15
outgoing	.38	enterprising	.21	independent	.21
spontaneous	.05	self-confident	.18	initiative	.25
talkative	.22	talkative	.10	resourceful	-.03
dull	-.36	anxious	-.32	confused	-.20
fearful	-.21	awkward	-.40	gloomy	-.10
reserved	-.08	timid	-.37	nervous	-.27
silent	-.28	unambitious	-.07	timid	-.42
withdrawn	-.35	withdrawn	-.33	withdrawn	-.32

(cont'd)

**TABLE G-8. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE SIMPLIFIED CHINESE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.26	conscientious	-.04	optimistic	.25
enterprising	.11	interests wide	.15	patient	.04
interests wide	.19	practical	-.02	reasonable	.03
outgoing	.22	rational	.19	relaxed	.00
sociable	.31	responsible	.26	wholesome	.07
distrustful	-.13	coarse	-.01	dissatisfied	-.25
interests narrow	-.28	distrustful	-.01	distrustful	-.09
nervous	-.17	immature	-.08	impulsive	-.17
silent	-.34	interests narrow	-.14	rebellious	.02
withdrawn	-.35	rattlebrained	-.19	restless	-.13
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	-.01	conscientious	.16	capable	.16
modest	.23	patient	.19	civilized	.09
patient	-.02	peaceable	.09	cooperative	.13
peaceable	.15	stable	.13	fair-minded	.10
quiet	.19	tactful	.06	reliable	.18
adventurous	-.08	changeable	-.11	complaining	-.10
aggressive	-.26	cynical	-.09	dissatisfied	-.17
impulsive	-.13	impulsive	-.16	self-pitying	-.24
rebellious	.03	restless	-.19	spineless	-.24
sarcastic	-.02	temperamental	-.05	sour	-.18
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.07	clear-thinking	-.01	efficient	.39
cheerful	.28	contented	-.07	industrious	.19
clear-thinking	.24	honest	.07	organized	.28
confident	.37	interests wide	.05	planful	.09
efficient	.33	optimistic	.16	thorough	-.20
confused	-.23	bitter	.07	aloof	.02
dissatisfied	-.17	complaining	-.17	coarse	.02
moody	-.23	dissatisfied	-.01	disorderly	-.08
nervous	-.32	distrustful	.01	distractible	-.08
pessimistic	-.30	nervous	-.17	rattlebrained	-.11
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	-.01	clear-thinking	.24	alert	.06
clear-thinking	.07	confident	.19	clear-thinking	.07
intelligent	.04	initiative	.16	efficient	.14
interests wide	.12	intelligent	-.08	intelligent	-.05
rational	.09	interests wide	.13	rational	.09
annoyed	-.21	absent-minded	-.10	anxious	-.36
cowardly	-.19	awkward	-.20	dissatisfied	-.18
distrustful	-.02	confused	-.19	distrustful	-.12
fearful	-.24	fearful	-.23	fearful	-.16
interests narrow	-.03	interests narrow	-.14	interests narrow	-.02

(cont'd)

**TABLE G-8. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE SIMPLIFIED CHINESE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.22	anxious	.21	efficient	.27
complicated	.12	fearful	.02	enterprising	.05
imaginative	.04	feminine	.23	initiative	.28
interests wide	-.12	inhibited	.01	poised	.15
unconventional	-.06	nervous	-.04	self-confident	.11
autocratic	-.09	adventurous	-.24	awkward	-.21
cautious	.00	arrogant	.10	interests narrow	-.20
conservative	.01	assertive	-.22	suspicious	-.31
fearful	-.03	masculine	-.24	timid	-.29
formal	-.05	outspoken	-.34	withdrawn	-.27
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.13	capable	-.11	ambitious	.16
reliable	.05	enterprising	-.07	enterprising	.14
responsible	.19	independent	.04	forceful	.22
tactful	-.04	interests wide	-.02	initiative	.26
thorough	-.18	original	.07	self-confident	.15
dissatisfied	-.15	anxious	-.19	awkward	-.31
distractible	-.16	cautious	-.14	inhibited	-.34
high-strung	-.21	dull	-.22	silent	-.29
moody	-.12	reserved	-.10	timid	-.36
restless	-.19	touchy	-.08	withdrawn	-.36
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.04	determined	-.04		
patient	.08	efficient	.09		
peaceable	.17	organized	.22		
relaxed	.07	painstaking	-.28		
wholesome	.07	reasonable	.01		
arrogant	-.06	absent-minded	-.04		
dissatisfied	-.15	changeable	-.20		
headstrong	-.21	confused	-.16		
sarcastic	-.09	disorderly	-.08		
suspicious	-.30	vindictive	-.09		

Note: *n* = 79.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the Simplified Chinese sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table G-9. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership and with low scores on Self-control, Sensitivity, and vec-

tor 1. Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance and with low scores on Self-control, Sensitivity, and vector 1. Finally, Neu-

**TABLE G-9. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS  
(SCORED THROUGH THE ACL) FOR THE SIMPLIFIED CHINESE SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.32	.16	.14	.23	-.14
Capacity for Status (Cs)	.29	.12	.08	.19	-.08
Sociability (Sy)	.27	.16	.14	.22	-.10
Social Presence (Sp)	.25	.15	.08	.17	-.18
Self-acceptance (Sa)	.25	.14	.15	.21	-.18
Independence (In)	.24	.15	.16	.20	-.17
Empathy (Em)	.25	.10	.06	.19	-.11
Responsibility (Re)	.05	.08	.10	.11	-.08
Social Conformity (So)	.10	.14	.13	.12	-.18
Self-control (Sc)	-.06	.03	.07	-.01	-.09
Good Impression (Gi)	.08	.12	.14	.11	-.12
Communality (Cm)	.04	.13	.14	.11	-.15
Well-being (Wb)	.16	.20	.21	.19	-.17
Tolerance (To)	.08	.09	.11	.10	-.06
Achievement via Conformance (Ac)	.13	.19	.18	.18	-.10
Achievement via Independence (Ai)	.16	.13	.13	.18	-.09
Conceptual Fluency (Cf)	.18	.17	.15	.20	-.12
Insightfulness (Is)	.15	.18	.14	.18	-.15
Flexibility (Fx)	.04	.01	.01	.04	.00
Sensitivity (Sn)	-.17	-.03	-.06	-.08	.07
Managerial Potential (Mp)	.22	.15	.16	.19	-.14
Work Orientation (Wo)	.11	.15	.16	.16	-.12
Creative Temperament (Ct)	.19	.10	.08	.14	-.07
Leadership (Lp)	.27	.19	.17	.22	-.19
Amicability (Ami)	.07	.15	.15	.11	-.18
Law Enforcement Orientation (Leo)	.05	.08	.08	.08	-.13
vector 1 (v.1)	-.22	-.04	-.01	-.12	.05
vector 2 (v.2)	.10	.10	.11	.10	-.07
vector 3 (v.3)	.13	.12	.13	.13	-.11

Note:  $n = 79$ .

roticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3. Again, the Simplified Chinese subsample was too small to be included in this analysis.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI

scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determination, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the Simplified Chinese sample and subsample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and

**TABLE G-10. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE SIMPLIFIED CHINESE SAMPLE AND SUBSAMPLE**

CPI 260® Scale	Simplified Chinese		Simplified Chinese (subsample)	
	Organizational Level		Organizational Level	
	Supervisor and below (n = 213)	Management and above (n = 73)	Supervisor and below (n = 173)	Management and above (n = 52)
Dominance (Do)	50.79	55.19	51.45	56.16
Capacity for Status (Cs)	48.14	51.36	48.15	52.60
Sociability (Sy)	49.36	53.16	50.07	54.31
Social Presence (Sp)	47.48	50.65	48.33	52.01
Self-acceptance (Sa)	49.30	52.87	49.98	54.01
Independence (In)	50.57	53.13	52.01	56.18
Empathy (Em)	52.39	55.26	52.24	55.22
Responsibility (Re)	45.43	45.88	46.78	48.48
Social Conformity (So)	44.08	44.27	45.96	47.34
Self-control (Sc)	47.67	46.12	48.39	47.49
Good Impression (Gi)	50.91	51.85	51.43	52.60
Communality (Cm)	37.79	36.23	42.51	41.89
Well-being (Wb)	40.08	41.51	42.35	45.04
Tolerance (To)	44.26	43.87	45.18	46.52
Achievement via Conformance (Ac)	47.74	49.13	49.40	51.94
Achievement via Independence (Ai)	46.87	46.71	47.88	49.41
Conceptual Fluency (Cf)	46.70	47.25	48.00	50.15
Insightfulness (Is)	47.98	48.19	49.10	50.75
Flexibility (Fx)	41.68	40.31	41.60	41.25
Sensitivity (Sn)	47.00	45.78	46.89	45.59
Managerial Potential (Mp)	47.60	50.37	48.23	51.87
Work Orientation (Wo)	42.30	42.86	44.22	46.54
Creative Temperament (Ct)	44.25	44.61	44.97	47.08
Leadership (Lp)	48.35	51.47	49.60	53.88
Amicability (Ami)	44.58	44.55	45.96	47.08
Law Enforcement Orientation (Leo)	50.49	50.07	51.95	52.71
vector 1 (v.1)	43.17	37.46	43.87	39.61
vector 2 (v.2)	54.09	57.01	54.40	55.98
vector 3 (v.3)	41.90	41.64	42.50	42.93

supervisory employees) and higher-level groups (management and above—includes management, executives, and top executives). These results are provided in Table G-10. The anticipated pattern of elevated scores was found among the higher-level organizational group for the Simplified Chinese samples. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores

are reported in standardized form, based on a sample of 286 individuals, nationally representative of the general Chinese population, for people of working age (over 18). In the sample, 49% were women and 51% were men; 94% were currently employed full-time and 6% part-time, with 55% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX H: TRADITIONAL CHINESE SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in Traditional Chinese. The sample described here was used to create the standardization formulas for Traditional Chinese and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the Traditional Chinese sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in Traditional Chinese as well as demographic and validity items. The targeted sample was selected to reflect the working population within the Chinese culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which Traditional Chinese is used. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal number of women and men. The data

were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents who had invalidity indicators (fake good, fake bad, and random) within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table H-1. As the fake bad and random indicators in this sample were outside normal ranges, most of the analyses in this appendix were conducted for both the Traditional Chinese sample and a subsample that does not include any cases flagged with an invalidity indicator. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table H-2 shows the demographic characteristics of the respondents in the Traditional Chinese sample and subsample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

**TABLE H-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE TRADITIONAL CHINESE SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	9	1.4
Fake bad	111	17.1
Random	70	10.8

Note: *N* = 649.

**TABLE H-2. DEMOGRAPHIC CHARACTERISTICS OF THE TRADITIONAL CHINESE SAMPLE AND SUBSAMPLE**

Demographic Characteristic	Traditional Chinese		Traditional Chinese (subsample)	
	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>				
Men	308	47	210	46
Women	341	53	249	54
<b>Employment status</b>				
Working full-time	598	92	421	92
Working part-time	51	8	38	8
<b>Organizational level</b>				
Entry level	96	15	63	14
Nonsupervisory	244	38	187	41
Supervisory	151	23	99	22
Management	94	14	63	14
Executive	41	6	27	6
Top executive	22	3	19	4
Not provided	1	<1	1	<1
Satisfied with job	524	81	373	81
<b>Industry</b>				
Agriculture, forestry, and fishing	5	1	3	1
Mining	3	<1	2	<1
Construction	41	6	32	7
Manufacturing	81	12	56	12
Wholesale trade	43	7	28	6
Retail trade	65	10	43	9
Finance, insurance, and real estate	55	8	43	9
Professional, scientific, and technical services	70	11	53	12
Personal care and other services	33	5	23	5
Transportation, electric, gas, and sanitary services	26	4	16	3
Information systems and technology	42	6	31	7
Information, media, and communications	44	7	30	7
Other	141	22	99	22
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
Age	30.6	7.3	31.1	7.6
Years working in current occupation	7.2	6.2	7.2	6.4

Note: Traditional Chinese *N* = 649, Traditional Chinese (subsample) *n* = 459. Not all respondents provided answers to all the demographic items.

The CPI 260 raw and standard score means and standard deviations for the Traditional Chinese sample are presented in Table H-3 and for the subsample in Table H-4. The standard

score means and standard deviations are also shown separately for each gender.

**TABLE H-3. CPI 260® SCALE RAW AND STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE TRADITIONAL CHINESE SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	16.50	6.10	49.54	9.33	49.20	9.11	49.92	9.58
Capacity for Status (Cs)	12.15	3.66	47.80	8.08	47.67	8.22	47.95	7.94
Sociability (Sy)	12.33	4.39	46.86	9.87	46.57	9.81	47.19	9.95
Social Presence (Sp)	15.69	3.51	44.78	8.56	44.88	9.08	44.67	7.97
Self-acceptance (Sa)	11.68	3.57	47.78	9.14	47.70	9.29	47.86	8.99
Independence (In)	11.33	3.76	48.21	9.01	47.72	8.75	48.76	9.28
Empathy (Em)	12.00	2.94	51.08	7.99	51.06	7.90	51.11	8.11
Responsibility (Re)	12.78	3.07	42.66	7.86	42.41	7.63	42.95	8.11
Social Conformity (So)	17.30	4.38	42.87	9.95	43.34	9.85	42.35	10.04
Self-control (Sc)	14.05	4.47	50.18	8.85	49.77	8.54	50.63	9.16
Good Impression (Gi)	12.93	3.96	51.76	8.39	51.44	8.06	52.11	8.74
Communality (Cm)	15.31	3.11	31.71	14.60	32.41	14.56	30.94	14.63
Well-being (Wb)	11.06	3.51	38.38	10.05	38.66	9.80	38.07	10.32
Tolerance (To)	9.23	3.69	45.26	8.93	45.15	8.44	45.38	9.45
Achievement via Conformance (Ac)	17.93	4.25	47.00	9.05	46.71	9.04	47.32	9.08
Achievement via Independence (Ai)	11.19	3.44	45.24	7.30	44.76	7.07	45.78	7.53
Conceptual Fluency (Cf)	16.26	4.15	44.53	8.22	44.05	8.13	45.06	8.30
Insightfulness (Is)	11.12	2.82	46.62	8.22	45.89	7.88	47.44	8.52
Flexibility (Fx)	7.26	3.34	44.08	9.05	44.01	8.82	44.16	9.31
Sensitivity (Sn)	13.43	2.95	47.59	7.37	49.53	7.01	45.44	7.18
Managerial Potential (Mp)	11.80	3.75	48.08	8.06	47.84	7.65	48.35	8.50
Work Orientation (Wo)	13.24	3.72	42.23	10.18	42.46	9.95	41.98	10.45
Creative Temperament (Ct)	12.49	3.80	44.54	9.23	44.87	9.01	44.17	9.47
Leadership (Lp)	19.90	6.22	46.27	9.52	46.08	9.34	46.49	9.72
Amicability (Ami)	14.56	4.46	43.53	9.69	43.35	9.52	43.73	9.88
Law Enforcement Orientation (Leo)	15.83	3.03	48.80	9.50	48.91	9.06	48.67	9.97
vector 1 (v.1)	10.29	4.72	46.15	10.85	46.57	10.62	45.69	11.10
vector 2 (v.2)	12.35	3.77	49.63	10.37	49.00	9.68	50.33	11.06
vector 3 (v.3)	11.72	5.30	43.94	8.85	43.85	8.17	44.05	9.56

Note: N = 649.

Internal consistency reliabilities (Cronbach's coefficient alphas) for the Traditional Chinese sample and subsample are shown in Table H-5. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from

the *CPI™ Manual* should be kept in mind: "In regard to reliability as assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items

**TABLE H-4. CPI 260® SCALE RAW AND STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE TRADITIONAL CHINESE SUBSAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	16.78	6.52	49.96	9.98	49.41	9.64	50.62	10.34
Capacity for Status (Cs)	12.23	3.81	47.97	8.41	47.92	8.39	48.03	8.46
Sociability (Sy)	12.62	4.59	47.53	10.33	47.12	9.98	48.01	10.74
Social Presence (Sp)	16.24	3.55	46.11	8.66	46.28	9.01	45.91	8.24
Self-acceptance (Sa)	11.84	3.75	48.18	9.61	48.17	9.59	48.20	9.66
Independence (In)	11.84	3.70	49.42	8.88	48.68	8.66	50.29	9.08
Empathy (Em)	11.89	2.99	50.78	8.14	50.77	7.97	50.79	8.36
Responsibility (Re)	13.49	2.82	44.48	7.22	44.09	7.15	44.95	7.28
Social Conformity (So)	18.28	4.05	45.10	9.20	45.38	9.03	44.77	9.41
Self-control (Sc)	14.70	4.25	51.47	8.42	50.69	8.37	52.40	8.40
Good Impression (Gi)	13.18	3.84	52.28	8.14	51.71	8.01	52.96	8.27
Communality (Cm)	16.81	1.94	38.74	9.09	39.15	8.59	38.25	9.64
Well-being (Wb)	11.92	3.29	40.85	9.41	40.94	9.07	40.74	9.81
Tolerance (To)	9.62	3.48	46.19	8.41	46.05	7.86	46.36	9.04
Achievement via Conformance (Ac)	19.00	3.82	49.27	8.13	48.83	8.04	49.78	8.23
Achievement via Independence (Ai)	11.62	3.14	46.17	6.66	45.38	6.36	47.11	6.89
Conceptual Fluency (Cf)	17.07	3.92	46.15	7.76	45.56	7.63	46.85	7.87
Insightfulness (Is)	11.61	2.64	48.06	7.67	47.09	7.51	49.20	7.71
Flexibility (Fx)	7.16	3.23	43.82	8.75	43.58	8.53	44.11	9.02
Sensitivity (Sn)	13.42	3.09	47.56	7.73	49.75	7.18	44.95	7.57
Managerial Potential (Mp)	11.98	3.74	48.47	8.03	47.92	7.44	49.13	8.66
Work Orientation (Wo)	14.16	3.38	44.77	9.27	44.77	9.05	44.77	9.55
Creative Temperament (Ct)	12.69	3.66	45.01	8.89	45.13	8.91	44.88	8.90
Leadership (Lp)	20.77	6.35	47.62	9.71	47.22	9.42	48.09	10.06
Amicability (Ami)	15.33	4.28	45.20	9.28	44.65	9.17	45.85	9.39
Law Enforcement Orientation (Leo)	16.33	2.85	50.38	8.92	49.96	8.61	50.88	9.27
vector 1 (v.1)	10.91	4.64	47.58	10.68	47.81	10.57	47.31	10.82
vector 2 (v.2)	12.45	3.69	49.93	10.14	49.12	9.51	50.88	10.78
vector 3 (v.3)	11.83	4.85	44.13	8.10	43.87	7.47	44.43	8.80

Note: n = 459.

solely on their demonstrated relationships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the Traditional Chinese samples using the folk scales. Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor

**TABLE H-5. CPI 260® SCALE ALPHAS FOR THE TRADITIONAL CHINESE SAMPLE AND SUBSAMPLE**

CPI 260® Scale	Traditional Chinese Cronbach's Alpha	Traditional Chinese (subsample) Cronbach's Alpha
Dominance (Do)	.83	.86
Capacity for Status (Cs)	.58	.64
Sociability (Sy)	.75	.79
Social Presence (Sp)	.49	.52
Self-acceptance (Sa)	.62	.68
Independence (In)	.66	.68
Empathy (Em)	.41	.47
Responsibility (Re)	.49	.43
Social Conformity (So)	.68	.63
Self-control (Sc)	.71	.68
Good Impression (Gi)	.65	.65
Communality (Cm)	.58	.10
Well-being (Wb)	.68	.65
Tolerance (To)	.70	.68
Achievement via Conformance (Ac)	.66	.62
Achievement via Independence (Ai)	.66	.48
Conceptual Fluency (Cf)	.65	.60
Insightfulness (Is)	.40	.36
Flexibility (Fx)	.62	.61
Sensitivity (Sn)	.33	.42
Managerial Potential (Mp)	.64	.64
Work Orientation (Wo)	.64	.59
Creative Temperament (Ct)	.58	.56
Leadership (Lp)	.81	.82
Amicability (Ami)	.71	.70
Law Enforcement Orientation (Leo)	.31	.25
vector 1 (v.1)	.83	.83
vector 2 (v.2)	.73	.73
vector 3 (v.3)	.80	.77

Note: Traditional Chinese *N* = 649, Traditional Chinese (subsample) *n* = 459.

analysis was conducted with a four-factor solution. The results are presented in Table H-6.

To examine precisely the similarity of factor structure of the Traditional Chinese sample and subsample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used

for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table H-7. The coefficients of congruence between corresponding factors (in bold) show that for both samples, factors 1 and 2 are nearly identical, while factors 3 and 4 have high levels of similarity.

**TABLE H-6. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE TRADITIONAL CHINESE SAMPLE AND SUBSAMPLE**

CPI 260® Scale	Traditional Chinese				Traditional Chinese (subsample)			
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.92	.12	.01	.14	.93	.07	-.03	.07
Capacity for Status (Cs)	.83	.14	.19	.10	.84	.08	.15	.15
Sociability (Sy)	.89	.07	-.04	.20	.90	.04	-.04	.18
Social Presence (Sp)	.68	-.12	.25	.44	.73	-.09	.29	.30
Self-acceptance (Sa)	.83	-.05	.11	.20	.87	-.07	.06	.12
Independence (In)	.69	.36	.25	.21	.78	.28	.08	.06
Empathy (Em)	.72	.08	.21	-.07	.72	.08	.27	.05
Responsibility (Re)	.20	.52	.00	.55	.22	.49	-.13	.46
Social Conformity (So)	.16	.64	.00	.48	.15	.63	-.08	.41
Self-control (Sc)	-.26	.87	.08	.06	-.32	.84	-.06	-.01
Good Impression (Gi)	.11	.87	-.02	-.09	.05	.84	-.15	-.13
Communality (Cm)	.05	.25	-.14	.82	.09	.25	-.20	.73
Well-being (Wb)	.29	.68	.10	.40	.31	.72	.06	.26
Tolerance (To)	.12	.75	.43	.12	.13	.77	.37	.11
Achievement via Conformance (Ac)	.33	.55	-.19	.54	.37	.49	-.34	.44
Achievement via Independence (Ai)	.40	.53	.48	.19	.47	.51	.35	.13
Conceptual Fluency (Cf)	.52	.42	.22	.45	.59	.38	.13	.40
Insightfulness (Is)	.33	.48	.33	.33	.39	.42	.21	.31
Flexibility (Fx)	-.07	.10	.87	-.21	-.04	.09	.84	-.27
Sensitivity (Sn)	-.66	-.15	.14	.19	-.69	-.14	.19	.25
Managerial Potential (Mp)	.57	.65	.17	.03	.59	.63	.10	.02
Work Orientation (Wo)	.13	.75	.14	.43	.14	.79	.07	.33
Creative Temperament (Ct)	.36	.16	.78	.04	.45	.08	.73	-.02
Leadership (Lp)	.82	.34	.00	.30	.86	.29	-.06	.23
Amicability (Ami)	.04	.84	.20	.22	.02	.87	.16	.18
Law Enforcement Orientation (Leo)	.41	.54	-.15	.20	.50	.46	-.30	-.07

Note: Traditional Chinese *N* = 649, Traditional Chinese (subsample) *n* = 459.

Respondents from the Traditional Chinese sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL. Selected

correlations between these two assessments are shown in Table H-8. The Traditional Chinese subsample was too small to include in this analysis.

**TABLE H-7. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE TRADITIONAL CHINESE SAMPLE AND SUBSAMPLE AND THE U.S. ENGLISH SAMPLE**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
Traditional Chinese: Factor 1	.98			
Traditional Chinese: Factor 2	.36	.99		
Traditional Chinese: Factor 3	.42	.35	.88	
Traditional Chinese: Factor 4	.51	.62	.03	.73
Traditional Chinese (subsample): Factor 1	.98			
Traditional Chinese (subsample): Factor 2	.32	.99		
Traditional Chinese (subsample): Factor 3	.30	.11	.92	
Traditional Chinese (subsample): Factor 4	.45	.54	.08	.80

**TABLE H-8. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE TRADITIONAL CHINESE SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	.26	enterprising	.22	active	.19
enterprising	.29	imaginative	.19	enterprising	.22
initiative	.53	interests wide	.26	initiative	.53
outgoing	.37	outgoing	.28	sociable	.46
talkative	.39	talkative	.30	talkative	.44
inhibited	-.27	awkward	-.01	nervous	-.06
retiring	.03	interests narrow	-.45	reserved	-.26
silent	-.34	silent	-.38	silent	-.32
timid	-.25	timid	-.25	timid	-.26
withdrawn	-.38	withdrawn	-.40	withdrawn	-.39
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	.30	ambitious	.09	confident	.43
energetic	.23	assertive	.36	enterprising	.15
outgoing	.32	enterprising	.11	independent	.16
spontaneous	.11	self-confident	.33	initiative	.37
talkative	.39	talkative	.29	resourceful	.31
dull	-.05	anxious	-.14	confused	-.14
fearful	-.26	awkward	-.16	gloomy	-.07
reserved	-.12	timid	-.32	nervous	-.23
silent	-.13	unambitious	-.20	timid	-.24
withdrawn	-.26	withdrawn	-.41	withdrawn	-.38

(cont'd)

**TABLE H-8. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE TRADITIONAL CHINESE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	.17	conscientious	.21	optimistic	.17
enterprising	.11	interests wide	-.15	patient	.00
interests wide	.22	practical	.14	reasonable	.01
outgoing	.29	rational	.03	relaxed	.05
sociable	.37	responsible	.07	wholesome	.07
distrustful	-.17	coarse	-.16	dissatisfied	-.18
interests narrow	-.21	distrustful	-.09	distrustful	-.26
nervous	-.14	immature	-.31	impulsive	-.28
silent	-.20	interests narrow	-.03	rebellious	-.26
withdrawn	-.37	rattlebrained	-.05	restless	-.18
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	-.09	conscientious	.15	capable	.14
modest	.05	patient	.06	civilized	.09
patient	-.01	peaceable	.11	cooperative	.25
peaceable	.10	stable	-.13	fair-minded	.04
quiet	.13	tactful	-.08	reliable	.28
adventurous	-.29	changeable	-.17	complaining	-.17
aggressive	-.20	cynical	-.24	dissatisfied	.01
impulsive	-.41	impulsive	-.38	self-pitying	-.10
rebellious	-.39	restless	-.19	spineless	-.23
sarcastic	-.18	temperamental	-.33	sour	-.06
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	.19	clear-thinking	-.08	efficient	.11
cheerful	.42	contented	.12	industrious	.18
clear-thinking	.10	honest	.05	organized	.20
confident	.30	interests wide	-.10	planful	.13
efficient	.06	optimistic	.12	thorough	.11
confused	-.19	bitter	-.41	aloof	.03
dissatisfied	-.21	complaining	-.34	coarse	-.10
moody	-.23	dissatisfied	-.30	disorderly	-.15
nervous	-.26	distrustful	-.28	distractible	-.42
pessimistic	-.22	nervous	-.33	rattlebrained	-.20
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	.20	clear-thinking	.11	alert	.12
clear-thinking	.14	confident	.23	clear-thinking	.13
intelligent	.18	initiative	.22	efficient	.07
interests wide	.05	intelligent	.14	intelligent	.17
rational	.19	interests wide	.12	rational	.13
annoyed	-.24	absent-minded	-.41	anxious	-.28
cowardly	-.28	awkward	-.16	dissatisfied	.00
distrustful	-.17	confused	-.13	distrustful	-.05
fearful	-.23	fearful	-.32	fearful	-.21
interests narrow	-.13	interests narrow	-.27	interests narrow	-.10

(cont'd)

**TABLE H-8. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE TRADITIONAL CHINESE SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	.13	anxious	.23	efficient	.02
complicated	.12	fearful	.28	enterprising	.14
imaginative	.11	feminine	.04	initiative	.23
interests wide	.02	inhibited	.19	poised	-.07
unconventional	.09	nervous	.27	self-confident	.20
autocratic	-.18	adventurous	-.22	awkward	-.12
cautious	-.07	arrogant	-.07	interests narrow	-.10
conservative	-.18	assertive	-.16	suspicious	-.29
fearful	-.07	masculine	-.06	timid	-.19
formal	-.04	outspoken	-.11	withdrawn	-.30
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	.24	capable	.12	ambitious	.18
reliable	.16	enterprising	-.08	enterprising	.27
responsible	.17	independent	.10	forceful	.32
tactful	.09	interests wide	.15	initiative	.44
thorough	-.17	original	.02	self-confident	.34
dissatisfied	-.26	anxious	-.16	awkward	-.01
distractible	-.26	cautious	.00	inhibited	-.31
high-strung	-.23	dull	-.13	silent	-.29
moody	-.30	reserved	-.17	timid	-.24
restless	-.21	touchy	-.15	withdrawn	-.37
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.15	determined	.03		
patient	.06	efficient	.02		
peaceable	.11	organized	.03		
relaxed	.10	painstaking	-.08		
wholesome	.04	reasonable	-.07		
arrogant	-.24	absent-minded	-.43		
dissatisfied	-.27	changeable	-.27		
headstrong	-.07	confused	-.21		
sarcastic	-.19	disorderly	-.28		
suspicious	-.29	vindictive	-.07		

Note: *n* = 101.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the Traditional Chinese sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table H-9. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership and with low scores on Self-control, Sensitivity, and vec-

tor 1. Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance and with low scores on Self-control, Sensitivity, and vector 1. Finally, Neu-

**TABLE H-9. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS (SCORED THROUGH THE ACL) FOR THE TRADITIONAL CHINESE SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.62	.23	.24	.45	-.20
Capacity for Status (Cs)	.51	.19	.12	.36	-.27
Sociability (Sy)	.63	.22	.23	.49	-.19
Social Presence (Sp)	.51	.27	.14	.44	-.17
Self-acceptance (Sa)	.51	.07	.13	.40	-.23
Independence (In)	.50	.16	.23	.40	-.43
Empathy (Em)	.46	.38	.21	.43	-.24
Responsibility (Re)	-.12	.08	.17	-.06	-.21
Social Conformity (So)	.02	.07	.09	-.01	-.41
Self-control (Sc)	-.38	.02	-.01	-.28	-.28
Good Impression (Gi)	-.14	.12	.22	-.07	-.40
Communality (Cm)	.13	.19	.27	.11	-.05
Well-being (Wb)	.20	.22	.24	.14	-.43
Tolerance (To)	-.11	.08	.04	-.07	-.45
Achievement via Conformance (Ac)	.12	.07	.40	.17	-.30
Achievement via Independence (Ai)	.06	.04	.17	.22	-.41
Conceptual Fluency (Cf)	.20	.05	.17	.25	-.41
Insightfulness (Is)	.17	.08	.17	.24	-.22
Flexibility (Fx)	-.02	.12	-.23	.06	-.09
Sensitivity (Sn)	-.31	.03	-.13	-.25	.30
Managerial Potential (Mp)	.23	.09	.21	.14	-.41
Work Orientation (Wo)	-.07	.11	.14	-.04	-.42
Creative Temperament (Ct)	.32	.15	.03	.24	-.30
Leadership (Lp)	.49	.20	.32	.38	-.31
Amicability (Ami)	-.15	.09	-.01	-.15	-.44
Law Enforcement Orientation (Leo)	.10	-.03	.14	.06	-.35
vector 1 (v.1)	-.58	-.13	-.18	-.45	-.11
vector 2 (v.2)	.06	-.05	.26	.05	-.16
vector 3 (v.3)	-.10	.12	.13	.04	-.50

Note:  $n = 101$ .

roticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3. Again, the Traditional Chinese subsample was too small to be included in this analysis.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI

scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determination, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the Traditional Chinese sample and subsample who provided their current organizational level, mean CPI 260 scores were examined. The samples obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and super-

**TABLE H-10. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE TRADITIONAL CHINESE SAMPLE AND SUBSAMPLE**

CPI 260® Scale	Traditional Chinese		Traditional Chinese (subsample)	
	Organizational Level		Organizational Level	
	Supervisor and below (n = 213)	Management and above (n = 73)	Supervisor and below (n = 173)	Management and above (n = 52)
Dominance (Do)	48.55	52.70	48.70	54.07
Capacity for Status (Cs)	47.08	50.09	47.08	50.86
Sociability (Sy)	45.96	49.73	46.30	51.48
Social Presence (Sp)	44.42	45.89	45.67	47.50
Self-acceptance (Sa)	46.99	50.22	47.11	51.60
Independence (In)	47.60	50.17	48.56	52.25
Empathy (Em)	50.36	53.37	49.86	53.73
Responsibility (Re)	42.22	43.97	44.04	45.80
Social Conformity (So)	42.73	43.33	44.97	45.59
Self-control (Sc)	50.17	50.21	51.57	51.19
Good Impression (Gi)	51.51	52.56	51.93	53.43
Communality (Cm)	31.75	31.54	38.68	38.86
Well-being (Wb)	38.07	39.38	40.53	41.94
Tolerance (To)	45.16	45.53	46.11	46.41
Achievement via Conformance (Ac)	46.52	48.50	48.73	51.00
Achievement via Independence (Ai)	44.93	46.24	45.70	47.69
Conceptual Fluency (Cf)	44.02	46.11	45.55	48.03
Insightfulness (Is)	46.13	48.15	47.49	49.85
Flexibility (Fx)	44.41	43.06	44.13	42.87
Sensitivity (Sn)	48.28	45.32	48.28	45.10
Managerial Potential (Mp)	47.39	50.28	47.70	50.98
Work Orientation (Wo)	42.12	42.51	44.63	45.13
Creative Temperament (Ct)	44.30	45.28	44.65	46.15
Leadership (Lp)	45.28	49.39	46.40	51.53
Amicability (Ami)	43.64	43.16	45.21	45.17
Law Enforcement Orientation (Leo)	48.43	50.02	49.87	52.13
vector 1 (v.1)	47.13	43.07	48.81	43.64
vector 2 (v.2)	48.86	52.06	49.02	52.84
vector 3 (v.3)	43.81	44.36	43.97	44.62

visory employees) and higher-level groups (management and above—includes management, executives, and top executives). These results are provided in Table H-10. The anticipated pattern of elevated scores was found among the higher-level organizational group for the Traditional Chinese samples. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores

are reported in standardized form, based on a sample of 649 individuals, nationally representative of the general Chinese population, for people of working age (over 18). In the sample, 53% were women and 47% were men; 92% were currently employed full-time and 8% part-time, with 46% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.

## APPENDIX I: LATIN AMERICAN SPANISH SAMPLE

U.S. scoring of the CPI 260 assessment was used for all samples and analyses reported in this appendix in order to indicate patterns of differences in how each of the CPI 260 scales functions psychometrically in the Latin American Spanish language. The sample described here was used to create the standardization formulas for Latin American Spanish and is reflected in commercial reports. Note that this results in means of 50 and standard deviations of 10 for the sample and therefore are not reported here. Raw scores and U.S. standard scores are noted in the analyses that follow.

Data for the Latin American Spanish sample were collected through a third-party market research company hired to recruit participants to complete the CPI 260 assessment in Latin American Spanish as well as demographic and validity items. The targeted sample was selected to reflect the working population within the Latin American Spanish culture. Employed adults and adults seeking full-time employment are the primary users of the CPI 260 assessment. No personally identifying information was collected, and respondents were paid for their participation. In order to represent employed adults in the target culture, for respondents to be included in the sample they had to be employed part- or full-time, be at least 18 years old, and have indicated that their country of origin or country of residence is one in which Latin American Spanish is spoken. Respondents with too many omitted items (13 or more) were removed from the sample. In addition, the sample has an approximately equal

number of women and men. The data were collected in two waves. The first wave included individuals who completed the CPI 260 assessment as well as the demographic and validity items. The second wave comprised a random subset of participants from the first wave who then completed the *Adjective Check List*.

Those respondents who had invalidity indicators (fake good, fake bad, and random) within the normal ranges were included. The number and percentage of respondents with each invalidity indicator are shown in Table I-1. The rate of each invalidity indicator is shown in the *CPI™ Manual* for numerous male and female samples, some of which are summarized here for comparison purposes. The rate of fake good cases reported in the *CPI™ Manual* for women ranges from 0% for several samples to 8.5% for a sample of police officer applicants, and for men ranges from 0% for several samples to 7.5% for a sample of police officer applicants. The rate of fake bad cases for women ranges from 0% for several samples to 8.8% for a sample of psychiatric patients, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients. Finally, the rate of random cases for women ranges from 0% for several samples to 3.8% for a sample of high school students, and for men ranges from 0% for several samples to 4.9% for a sample of psychiatric patients (Gough & Bradley, 1996/2002).

Table I-2 shows the demographic characteristics of the respondents in the Latin American Spanish sample. The table includes the number and percentage of respondents by gender, employment status (full-time or part-time), organizational level, whether they are satisfied with their job, and their self-reported industry of employment. The table also provides their average age and average number of years working in their current occupation.

The CPI 260 raw and standard score means and standard deviations for the Latin American Spanish sample are presented in Table I-3. The standard score means and standard deviations are also shown separately for each gender.

**TABLE I-1. FAKE GOOD, FAKE BAD, AND RANDOM INVALIDITY INDICATORS IN THE LATIN AMERICAN SPANISH SAMPLE**

Invalidity Indicator	<i>n</i>	%
Fake good	18	6.9
Fake bad	7	2.7
Random	5	1.9

Note: *N* = 261.

**TABLE I-2. DEMOGRAPHIC CHARACTERISTICS OF THE LATIN AMERICAN SPANISH SAMPLE**

Demographic Characteristic	<i>n</i>	%
<b>Gender</b>		
Men	110	42
Women	151	58
<b>Employment status</b>		
Working full-time	178	68
Working part-time	83	32
<b>Organizational level</b>		
Entry level	24	9
Nonsupervisory	65	25
Supervisory	58	22
Management	46	18
Executive	41	16
Top executive	24	9
Not provided	3	1
Satisfied with job	234	90
<b>Industry</b>		
Agriculture, forestry, and fishing	3	1
Mining	0	0
Construction	19	7
Manufacturing	13	5
Wholesale trade	15	6
Retail trade	30	11
Finance, insurance, and real estate	19	7
Professional, scientific, and technical services	50	19
Personal care and other services	5	2
Transportation, electric, gas, and sanitary services	6	2
Information systems and technology	19	7
Information, media, and communications	16	6
Other	64	25
	<b>Mean</b>	<b>SD</b>
Age	34.6	10.5
Years working in current occupation	8.7	7.9

Note: *N* = 261. Not all respondents provided answers to all the demographic items.

Internal consistency reliabilities (Cronbach’s coefficient alphas) for the Latin American Spanish sample are shown in Table I-4. Most of the alphas for this sample are acceptable to good and are very similar to those reported in the *CPI 260® Manual* for the U.S. workforce sample. In interpreting these reliabilities, the following statement from the *CPI™ Manual*

should be kept in mind: “In regard to reliability as assessed by the intercorrelation of items within a scale, whereas many tests posit this as a high priority, interitem homogeneity is not a goal on the CPI. The reason for this statement is that 13 of the 20 folk scales are developed by empirical methodology, which bases the selection of items solely on their demon-

**TABLE I-3. CPI 260® SCALE RAW AND U.S. STANDARD SCORE MEANS AND STANDARD DEVIATIONS FOR THE LATIN AMERICAN SPANISH SAMPLE**

CPI 260® Scale	Raw Scores		Standard Scores		Standard Scores: Women		Standard Scores: Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dominance (Do)	22.76	5.98	59.12	9.14	59.91	8.72	58.04	9.63
Capacity for Status (Cs)	15.96	3.98	56.21	8.80	56.53	8.12	55.78	9.68
Sociability (Sy)	16.53	3.74	56.32	8.41	56.38	8.03	56.23	8.95
Social Presence (Sp)	19.04	3.36	52.95	8.21	53.92	7.92	51.61	8.44
Self-acceptance (Sa)	15.48	3.18	57.51	8.15	58.46	7.85	56.20	8.40
Independence (In)	15.70	3.40	58.68	8.15	59.14	7.58	58.06	8.86
Empathy (Em)	14.82	2.98	58.76	8.09	59.37	7.97	57.91	8.22
Responsibility (Re)	16.24	3.10	51.51	7.92	51.91	7.63	50.97	8.30
Social Conformity (So)	20.45	4.13	50.02	9.37	49.83	8.97	50.28	9.93
Self-control (Sc)	14.03	4.55	50.14	9.00	49.63	9.32	50.84	8.55
Good Impression (Gi)	13.79	4.57	53.57	9.68	52.54	9.67	54.99	9.55
Communality (Cm)	18.17	2.25	45.12	10.55	46.65	9.64	43.00	11.38
Well-being (Wb)	14.85	3.59	49.22	10.27	49.28	9.97	49.14	10.72
Tolerance (To)	11.57	3.72	50.93	9.01	51.62	8.45	49.98	9.68
Achievement via Conformance (Ac)	21.00	4.00	53.53	8.51	53.87	7.92	53.05	9.27
Achievement via Independence (Ai)	14.29	3.44	51.83	7.29	51.66	6.59	52.06	8.18
Conceptual Fluency (Cf)	19.69	4.15	51.32	8.22	51.80	7.67	50.66	8.92
Insightfulness (Is)	12.86	2.82	51.68	8.19	52.04	8.34	51.20	8.01
Flexibility (Fx)	7.12	3.04	43.72	8.25	44.25	8.22	42.99	8.27
Sensitivity (Sn)	11.73	2.97	43.32	7.43	45.47	6.52	40.36	7.61
Managerial Potential (Mp)	14.77	4.13	54.48	8.88	54.91	8.54	53.89	9.33
Work Orientation (Wo)	15.34	3.51	47.99	9.60	48.01	9.52	47.96	9.76
Creative Temperament (Ct)	16.17	3.44	53.47	8.35	54.16	8.57	52.53	7.99
Leadership (Lp)	27.04	6.19	57.21	9.47	57.63	9.00	56.63	10.09
Amicability (Ami)	16.77	4.36	48.34	9.46	47.95	9.76	48.87	9.06
Law Enforcement Orientation (Leo)	17.50	2.93	54.03	9.18	53.59	8.83	54.64	9.65
vector 1 (v.1)	7.410	3.71	39.53	8.52	38.76	8.56	40.58	8.39
vector 2 (v.2)	14.10	2.94	54.45	8.07	53.96	7.83	55.13	8.38
vector 3 (v.3)	14.59	5.46	48.73	9.11	48.90	8.57	48.50	9.84

Note: N = 261.

strated relationships to nontest criteria” (Gough & Bradley, 1996, p. 57). Given this, “moderate heterogeneity among the items in a scale is acceptable and, in fact, to be expected” (p. 59).

Principal components factor analysis with varimax rotation was conducted for the Latin American Spanish sample using

the folk scales. Because previous factor analyses have shown primarily four factors (Gough & Bradley, 2005), this factor analysis was conducted with a four-factor solution. The results are presented in Table I-5.

**TABLE I-4. CPI 260® SCALE ALPHAS FOR THE LATIN AMERICAN SPANISH SAMPLE**

CPI 260® Scale	Cronbach's Alpha	CPI 260® Scale	Cronbach's Alpha
Dominance (Do)	.86	Achievement via Independence (Ai)	.66
Capacity for Status (Cs)	.69	Conceptual Fluency (Cf)	.70
Sociability (Sy)	.73	Insightfulness (Is)	.52
Social Presence (Sp)	.55	Flexibility (Fx)	.58
Self-acceptance (Sa)	.63	Sensitivity (Sn)	.38
Independence (In)	.71	Managerial Potential (Mp)	.76
Empathy (Em)	.46	Work Orientation (Wo)	.72
Responsibility (Re)	.63	Creative Temperament (Ct)	.57
Social Conformity (So)	.74	Leadership (Lp)	.87
Self-control (Sc)	.74	Amicability (Ami)	.74
Good Impression (Gi)	.76	Law Enforcement Orientation (Leo)	.37
Communality (Cm)	.52	vector 1 (v.1)	.73
Well-being (Wb)	.80	vector 2 (v.2)	.63
Tolerance (To)	.73	vector 3 (v.3)	.80
Achievement via Conformance (Ac)	.72		

Note: N = 261.

**TABLE I-5. KAISER NORMAL VARIMAX ROTATED FACTOR LOADINGS FROM PRINCIPAL COMPONENTS FACTOR ANALYSIS OF CPI 260® SCALES FOR THE LATIN AMERICAN SPANISH SAMPLE**

CPI 260® Scale	Factor 1	Factor 2	Factor 3	Factor 4
Dominance (Do)	.91	.24	.00	.06
Capacity for Status (Cs)	.79	.35	.21	.05
Sociability (Sy)	.86	.15	-.02	-.02
Social Presence (Sp)	.73	.01	.31	.19
Self-acceptance (Sa)	.86	-.05	.02	.24
Independence (In)	.79	.35	.09	.07
Empathy (Em)	.59	.35	.23	.05
Responsibility (Re)	.23	.68	.01	.39
Social Conformity (So)	.29	.75	-.17	.22
Self-control (Sc)	-.21	.89	-.11	.01
Good Impression (Gi)	.04	.86	-.13	-.15
Communality (Cm)	.24	.25	-.19	.76
Well-being (Wb)	.46	.72	.03	.11
Tolerance (To)	.23	.76	.39	.07
Achievement via Conformance (Ac)	.47	.69	-.16	.19
Achievement via Independence (Ai)	.44	.60	.43	.04
Conceptual Fluency (Cf)	.57	.59	.21	.16
Insightfulness (Is)	.43	.59	.28	.02
Flexibility (Fx)	-.02	-.09	.81	-.22
Sensitivity (Sn)	-.62	-.02	.18	.45
Managerial Potential (Mp)	.56	.67	.17	-.05
Work Orientation (Wo)	.27	.81	.01	.17
Creative Temperament (Ct)	.49	.13	.69	.11
Leadership (Lp)	.79	.51	-.04	.11
Amicability (Ami)	.08	.88	.11	.08
Law Enforcement Orientation (Leo)	.43	.49	-.39	-.13

Note: N = 261.

**TABLE I-6. COEFFICIENTS OF CONGRUENCE FOR CPI 260® FACTORS IN THE LATIN AMERICAN SPANISH AND U.S. ENGLISH SAMPLES**

Sample: Factor	U.S. English	U.S. English	U.S. English	U.S. English
	Factor 1	Factor 2	Factor 3	Factor 4
Latin American Spanish: Factor 1	<b>.98</b>			
Latin American Spanish: Factor 2	.45	<b>.98</b>		
Latin American Spanish: Factor 3	.37	.14	<b>.96</b>	
Latin American Spanish: Factor 4	.26	.29	.09	<b>.78</b>

To examine precisely the similarity of factor structure of the Latin American Spanish sample compared to that of the U.S. normative sample, the Wrigley-Neuhaus (1955) factor similarity coefficient was used. The U.S. sample used for this analysis was the U.S. normative sample used in the *CPI 260® Manual* (Gough & Bradley, 2005). The results of the factor similarity analysis are shown in Table I-6. The coefficients of congruence between corresponding factors (in bold) show

that factors 1, 2, and 3 are nearly identical, while factor 4 has a high level of similarity.

Respondents from the Latin American Spanish sample also completed the ACL assessment. To demonstrate convergent validity, CPI 260 scales were correlated with the ACL. Selected correlations between these two assessments are shown in Table I-7.

**TABLE I-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE LATIN AMERICAN SPANISH SAMPLE**

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Dominance (Do)</b>		<b>Capacity for Status (Cs)</b>		<b>Sociability (Sy)</b>	
ambitious	-.01	enterprising	-.06	active	.07
enterprising	.00	imaginative	-.01	enterprising	.06
initiative	.16	interests wide	.08	initiative	.11
outgoing	.04	outgoing	.07	sociable	.03
talkative	.08	talkative	.06	talkative	.06
inhibited	.17	awkward	-.11	nervous	.02
retiring	.08	interests narrow	.03	reserved	.12
silent	.06	silent	.10	silent	.07
timid	.03	timid	.02	timid	.03
withdrawn	.01	withdrawn	.00	withdrawn	.04
<b>Social Presence (Sp)</b>		<b>Self-acceptance (Sa)</b>		<b>Independence (In)</b>	
adventurous	-.07	ambitious	-.07	confident	-.03
energetic	.07	assertive	.09	enterprising	-.01
outgoing	-.01	enterprising	.03	independent	.07
spontaneous	.03	self-confident	.13	initiative	.10
talkative	-.02	talkative	.04	resourceful	.04
dull	.03	anxious	.10	confused	-.05
fearful	.10	awkward	-.15	gloomy	.07
reserved	.07	timid	.00	nervous	-.09
silent	.00	unambitious	-.06	timid	-.03
withdrawn	.06	withdrawn	.02	withdrawn	.00

(cont'd)

**TABLE I-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE LATIN AMERICAN SPANISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Empathy (Em)</b>		<b>Responsibility (Re)</b>		<b>Social Conformity (So)</b>	
confident	-.02	conscientious	.08	optimistic	.05
enterprising	-.12	interests wide	.16	patient	.05
interests wide	.12	practical	.05	reasonable	.03
outgoing	.05	rational	.08	relaxed	.13
sociable	.02	responsible	-.02	wholesome	.08
distrustful	-.04	coarse	.01	dissatisfied	-.05
interests narrow	-.05	distrustful	.08	distrustful	-.03
nervous	-.01	immature	-.01	impulsive	.08
silent	.09	interests narrow	.07	rebellious	.14
withdrawn	.04	rattlebrained	-.08	restless	.03
<b>Self-control (Sc)</b>		<b>Good Impression (Gi)</b>		<b>Community (Cm)</b>	
calm	.09	conscientious	.04	capable	-.03
modest	.05	patient	.21	civilized	.03
patient	.14	peaceable	.23	cooperative	.07
peaceable	.12	stable	.09	fair-minded	.05
quiet	.01	tactful	.15	reliable	.04
adventurous	.03	changeable	.07	complaining	.10
aggressive	-.07	cynical	.06	dissatisfied	.06
impulsive	.13	impulsive	.07	self-pitying	.06
rebellious	.03	restless	.09	spineless	.06
sarcastic	-.03	temperamental	.05	sour	.01
<b>Well-being (Wb)</b>		<b>Tolerance (To)</b>		<b>Achievement via Conformance (Ac)</b>	
active	-.06	clear-thinking	.09	efficient	.10
cheerful	-.12	contented	.04	industrious	.13
clear-thinking	.04	honest	.12	organized	.20
confident	.07	interests wide	.13	planful	.23
efficient	.01	optimistic	.06	thorough	.23
confused	-.03	bitter	.09	aloof	.07
dissatisfied	-.12	complaining	-.06	coarse	.15
moody	.08	dissatisfied	-.05	disorderly	-.09
nervous	-.04	distrustful	-.05	distractible	-.02
pessimistic	-.04	nervous	.01	rattlebrained	.05
<b>Achievement via Independence (Ai)</b>		<b>Conceptual Fluency (Cf)</b>		<b>Insightfulness (Is)</b>	
capable	-.03	clear-thinking	.06	alert	.10
clear-thinking	.01	confident	.07	clear-thinking	.01
intelligent	.12	initiative	.10	efficient	.05
interests wide	.13	intelligent	.22	intelligent	.14
rational	.03	interests wide	.19	rational	.04
annoyed	.08	absent-minded	-.10	anxious	.01
cowardly	-.01	awkward	-.02	dissatisfied	-.08
distrustful	-.03	confused	-.01	distrustful	.03
fearful	.05	fearful	-.01	fearful	.06
interests narrow	.10	interests narrow	.03	interests narrow	.04

(cont'd)

**TABLE I-7. CORRELATIONS OF CPI 260® SCALES WITH KEY ADJECTIVAL SELF-DESCRIPTIONS FOR THE LATIN AMERICAN SPANISH SAMPLE *CONT'D***

CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>	CPI 260® Scale and ACL Adjectives	<i>r</i>
<b>Flexibility (Fx)</b>		<b>Sensitivity (Sn)</b>		<b>Managerial Potential (Mp)</b>	
changeable	-.04	anxious	.09	efficient	.08
complicated	-.14	fearful	.07	enterprising	.07
imaginative	-.12	feminine	.01	initiative	.15
interests wide	-.03	inhibited	-.15	poised	.25
unconventional	-.01	nervous	-.06	self-confident	.20
autocratic	-.06	adventurous	.01	awkward	-.03
cautious	-.02	arrogant	-.07	interests narrow	.00
conservative	-.14	assertive	.00	suspicious	.04
fearful	.10	masculine	.09	timid	-.03
formal	.01	outspoken	-.06	withdrawn	.01
<b>Work Orientation (Wo)</b>		<b>Creative Temperament (Ct)</b>		<b>Leadership (Lp)</b>	
conscientious	-.02	capable	-.01	ambitious	.03
reliable	.14	enterprising	-.10	enterprising	.01
responsible	.05	independent	-.02	forceful	.10
tactful	.12	interests wide	.03	initiative	.15
thorough	.16	original	-.12	self-confident	.16
dissatisfied	-.02	anxious	-.07	awkward	-.08
distractible	-.03	cautious	-.11	inhibited	.16
high-strung	.16	dull	.00	silent	.08
moody	.01	reserved	-.08	timid	.04
restless	.03	touchy	.01	withdrawn	.04
<b>Amicability (Ami)</b>		<b>Law Enforcement Orientation (Leo)</b>			
contented	.17	determined	.15		
patient	.15	efficient	.09		
peaceable	.11	organized	.12		
relaxed	.06	painstaking	.11		
wholesome	.07	reasonable	.11		
arrogant	-.03	absent-minded	.00		
dissatisfied	-.10	changeable	.15		
headstrong	.05	confused	-.02		
sarcastic	.01	disorderly	-.14		
suspicious	.04	vindictive	.16		

Note: *n* = 181.

A method for scoring the ACL into the Big Five personality factors (John, 1989) was used to score the Latin American Spanish sample's responses to the ACL. The Big Five factors were then correlated with the CPI 260 scales, and the results are presented in Table I-8. The Big Five factors correlate with CPI 260 scales in expected ways. For example, Extraversion is associated with high scores on several scales, including Dominance, Capacity for Status, Sociability, Empathy, and Leadership, and with low scores on Self-control, Sensitivity, and vec-

tor 1. Agreeableness is associated with high scores on Sociability and Empathy and with low scores on vector 2. Conscientiousness is associated with high scores on Dominance, Independence, Responsibility, and Achievement via Conformance and with low scores on Flexibility, Sensitivity, and vector 1. Openness is associated with high scores on several CPI 260 scales, including Dominance, Capacity for Status, Sociability, Social Presence, and Self-acceptance, and with low scores on Self-control, Sensitivity, and vector 1. Finally, Neu-

**TABLE I-8. CORRELATIONS OF CPI 260® SCALES WITH BIG FIVE FACTORS (SCORED THROUGH THE ACL) FOR THE LATIN AMERICAN SPANISH SAMPLE**

CPI 260® Scale	Big Five Factor				
	Extraversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Dominance (Do)	.06	.13	.13	.12	.11
Capacity for Status (Cs)	.02	.14	.11	.10	.01
Sociability (Sy)	.06	.13	.16	.13	.09
Social Presence (Sp)	-.01	.07	.02	.07	.04
Self-acceptance (Sa)	.08	.12	.11	.14	.14
Independence (In)	.07	.06	.06	.11	.01
Empathy (Em)	.01	.11	.08	.11	.03
Responsibility (Re)	.08	.16	.14	.19	.07
Social Conformity (So)	.11	.20	.16	.23	.02
Self-control (Sc)	.11	.16	.14	.12	-.05
Good Impression (Gi)	.16	.23	.26	.24	-.03
Communality (Cm)	.05	.12	.13	.23	.13
Well-being (Wb)	.08	.07	.05	.14	.03
Tolerance (To)	.08	.18	.11	.13	.05
Achievement via Conformance (Ac)	.17	.22	.23	.29	.09
Achievement via Independence (Ai)	.08	.18	.10	.12	.01
Conceptual Fluency (Cf)	.18	.21	.20	.21	.03
Insightfulness (Is)	.05	.15	.03	.11	-.02
Flexibility (Fx)	-.10	.01	-.01	-.08	-.19
Sensitivity (Sn)	-.04	.10	-.02	.00	-.05
Managerial Potential (Mp)	.09	.19	.22	.21	.06
Work Orientation (Wo)	.05	.22	.21	.30	-.02
Creative Temperament (Ct)	.12	-.01	-.12	-.05	.00
Leadership (Lp)	.11	.14	.15	.15	.06
Amicability (Ami)	.24	.18	.11	.22	-.05
Law Enforcement Orientation (Leo)	-.06	.12	.20	.20	.10
vector 1 (v.1)	.09	.01	-.05	.00	-.08
vector 2 (v.2)	.17	.13	.16	.14	.04
vector 3 (v.3)	.18	.22	.20	.17	.00

Note: n = 181.

roticism is associated with high scores on Sensitivity and with low scores on several scales, including Dominance, Social Presence, Independence, Conceptual Fluency, Managerial Potential, Work Orientation, and vector 3.

Past research has shown a consistent pattern in the CPI profiles of organizational members based on hierarchical level. In the United States, the pattern shows that higher-level organizational members have higher scores on most of the CPI scales than lower-level organizational members. Specifically, higher scores among the scales that relate to “drive, determi-

nation, and a willingness to make difficult decisions” (Do, In, Mp, and Lp) are usually found among managers (Gough & Bradley, 2005, pp. 65–66). Using the respondents in the Latin American Spanish sample who provided their current organizational level, mean CPI 260 scores were examined. The sample obtained did not allow a detailed examination of organizational level; however, the respondents for each sample were divided into lower-level groups (supervisor and below—includes entry-level, nonsupervisory, and supervisory employees) and higher-level groups (management and above—includes management, executives, and top execu-

**TABLE I-9. CPI 260® SCALE STANDARD SCORE MEANS BY ORGANIZATIONAL LEVEL FOR THE LATIN AMERICAN SPANISH SAMPLE**

CPI 260® Scale	Organizational Level	
	Supervisor and below (n = 147)	Management and above (n = 111)
Dominance (Do)	57.36	61.61
Capacity for Status (Cs)	54.60	58.57
Sociability (Sy)	55.21	58.05
Social Presence (Sp)	52.51	53.65
Self-acceptance (Sa)	56.25	59.29
Independence (In)	56.93	61.07
Empathy (Em)	57.40	60.69
Responsibility (Re)	50.09	53.32
Social Conformity (So)	48.91	51.64
Self-control (Sc)	49.18	51.40
Good Impression (Gi)	52.70	54.81
Communality (Cm)	44.52	46.02
Well-being (Wb)	47.79	51.31
Tolerance (To)	50.10	52.11
Achievement via Conformance (Ac)	52.23	55.38
Achievement via Independence (Ai)	50.57	53.71
Conceptual Fluency (Cf)	49.89	53.35
Insightfulness (Is)	50.33	53.56
Flexibility (Fx)	43.63	43.95
Sensitivity (Sn)	43.93	42.45
Managerial Potential (Mp)	52.83	56.79
Work Orientation (Wo)	46.81	49.78
Creative Temperament (Ct)	51.99	55.49
Leadership (Lp)	55.34	59.86
Amicability (Ami)	47.20	49.92
Law Enforcement Orientation (Leo)	53.28	55.01
vector 1 (v.1)	40.38	38.20
vector 2 (v.2)	53.67	55.49
vector 3 (v.3)	47.20	50.87

Note: N = 261. Not all respondents provided answers to all the demographic items.

tives). These results are provided in Table I-9. The anticipated pattern of elevated scores was found among the higher-level organizational group for the Latin American Spanish sample. This replication of the pattern typically found in the United States provides additional validity evidence for this translation of the CPI 260 assessment.

Translated CPI 260 reports that make use of modified norm computations use the data from this technical brief. Scores are reported in standardized form, based on a sample of 261

individuals, nationally representative of the general Latin American Spanish population, for people of working age (over 18). In the sample, 58% were women and 42% were men; 68% were currently employed full-time and 32% part-time, with 65% describing themselves as being at supervisor level or above. For each scale, 50 is the norm-based midpoint. The lower the score, the more relevant will be the comments to the left of the graph; the higher the score, the more relevant will be those to the right of the graph.