## tki.

## International Technical Brief for the

## THOMAS-KILMANN CONFLICT MODE INSTRUMENT

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## PURPOSE

The Thomas-Kilmann Confict Mode Instrument (TKI) is a personality assessment that examines the ways that individuals deal with conflict. Currently, the TKI is scored in terms of percentiles based on data gathered in the United States. This technical brief uses existing data to see whether samples from other nations diverge significantly from U.S. norms.

## THE THOMAS-KILMANN CONFLICT MODE INSTRUMENT

The TKI assessment, developed by Kenneth W. Thomas and Ralph H. Kilmann, is based on a conceptual framework originally proposed by Robert Blake and Jane Mouton (1964). Blake and Mouton suggested that there were five basic attitudes and styles of control for managers that could be placed on a managerial grid (Blake and Mouton, 1964). Thomas refined the conflict aspects of this framework in the early 1970s (Thomas, 2002). The revised TKI assessment conflict model identifies five different "conflict-handling modes," or ways of dealing with conflict (Schaubhut, 2007): competing, collaborating, compromising, avoiding, and accommodating. These modes can be described along two independent dimensions: assertiveness, the degree to which individuals attempt to satisfy their own concerns, and cooperativeness, the degree to which individuals attempt to satisfy other people's concerns (Thomas \& Kilmann, 1974, 2007). As described in Introduction to Conflict Management (Thomas, 2002), the conflict modes represent the following major combinations of assertiveness and cooperation:

- Competing is assertive and uncooperative. Individuals who use this mode try to satisfy their own concerns at the other person's expense.
- Collaborating is both assertive and cooperative. Individuals who use this mode try to find a win-win solution that completely satisfies both persons' concerns.
- Compromising is intermediate in both assertiveness and cooperativeness. Individuals who use this mode try to find an acceptable settlement that only partially satisfies both persons' concerns.
- Avoiding is both unassertive and uncooperative. Individuals who use this mode sidestep the conflict without trying to satisfy either person's concerns.
- Accommodating is unassertive and cooperative. Individuals who use this mode attempt to satisfy the other person's concerns at the expense of their own.

The TKI assessment helps individuals identify the conflict modes they use most often and also gives them the concepts to identify the modes used by others. Understanding one's conflict-handling style and the broader range of conflict modes can help individuals manage conflict more constructively. The TKI assessment is commonly used in a variety of applications, such as management and supervisory training, team building, leadership coaching, and marriage and family counseling.

Two sets of scores are generated from TKI assessment results: raw scores on each of the five conflict modes and corresponding percentile scores. In general terms, the percentile scores indicate the percentage of people in a norm group who scored at or below a given raw score. In addition, percentile scores are partitioned into three interpretive ranges-high (the top $25 \%$ ), medium (the middle $50 \%$ ), and low (the bottom $25 \%$ ) based on percentile scores. For information on the more precise method used to calculate percentiles for the TKI assessment, see Appendix H.

A key attribute of the TKI assessment is that it controls for social desirability of the response options. Past research has suggested that a failure to control socially desirable responding can decrease test validity (Edwards, 1970). Thus, Thomas and Kilmann were careful in addressing the issue when developing the TKI assessment. A study examining the ability of the instrument to control social desirability found that the TKI significantly reduces the social desirability response bias when compared to three similar tools assessing conflict behavior (Kilmann \& Thomas, 1977; for a copy of this paper, see "References.")

## U.S. NORM SAMPLE

In 2007, the U.S. Norm Sample (often referred to as the TKI Norm Sample) was updated to reflect possible changes in occupational and demographic composition of the U.S. workforce (Schaubhut, 2007). The new norm sample resulted in an update of the percentile values for scores on the five conflict modes.

The 2007 U.S. Norm Sample included 8,000 adults from the U.S. employed population. Respondents represented a number of racial and ethnic groups and self-reported working in a variety of occupations. Individuals in this sample were selected to mirror the U.S. workforce as reported by the Bureau of Labor Statistics (U.S. Department of Labor, n.d.).

|  | Percentile |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Raw Score | Competing | Collaborating | Compromising | Avoiding | Accommodating |
| 0 | 3 | 0 | 0 | 1 | 0 |
| 1 | 10 | 1 | 0 | 2 | 2 |
| 2 | 20 | 3 | 1 | 6 | 7 |
| 3 | 31 | 7 | 3 | 12 | 16 |
| 4 | 44 | 15 | 7 | 22 | 30 |
| 5 | 57 | 26 | 15 | 44 | 46 |
| 6 | 69 | 41 | 27 | 65 | 62 |
| 7 | 79 | 74 | 58 | 78 | 76 |
| 10 | 87 | 87 | 75 | 88 | 97 |
| 11 | 93 | 95 | 97 | 95 | 94 |
| 12 | 96 | 98 | 99 | 98 | 98 |

Note: $N=8,000$. Percentiles are rounded up.

Table 1 shows the updated norms for the TKI based on the U.S. Norm Sample.

As previously noted, respondents included in the 2007 U.S. Norm Sample were all drawn from the United States. However, the TKI assessment is commonly used outside the U.S.; thus, CPP, Inc., the publisher of the instrument, sought to determine whether the assessment was functioning in a similar manner cross-culturally. This technical brief summarizes the results of those analyses. Essentially, it examines the percentile ranks, raw score distributions, and interpretive ranges for each country, as well as the mean score differences of conflict modes by gender and country.

## INTERNATIONAL SAMPLE

The International Sample, used for the analyses presented in this document, is a sample of convenience collected from CPP's commercial database. This database includes individuals who took the TKI assessment from 2002 to 2010 using CPP's commercial Web site, SkillsOne.com. Most of the respondents completed the assessment in U.S. English, with the single exception of the Canadian French sample. To be
included in this analysis, respondents had to report their country of origin and country of residence as one outside the U.S. (e.g., born and currently residing in Germany). In addition, they had to provide the same response to both items (country of origin and country of residence), choosing from a list of over 200 different countries. They also needed to be at least 18 years of age. A minimum of 100 respondents were required for a country to be included in the International Sample. The information provided by the International Sample is useful for examining whether there are significant differences in TKI scores based on the country in which a participant is residing. However, these findings should not be used to make definitive generalizations regarding the preferred conflict-handling modes of people in a given country.

The final International Sample included 6,168 individuals representing 16 countries: Australia, Brazil, Canada (two samples-English speakers and Canadian French speakers), People's Republic of China, France, Germany, India, Republic of Ireland, Italy, Japan, Mexico, New Zealand, Singapore, South Africa, Sweden, and the United Kingdom. Table 2 shows the total number of people and gender breakdown for each of these countries and for the U.S. Norm Sample.

## TABLE 2. GENDER COMPOSITION OF THE U.S. NORM SAMPLE AND

 THE INTERNATIONAL SAMPLE BY COUNTRY| Sample | $n$ | Women $\%$ | Men \% |
| :--- | :---: | :---: | :---: |
| U.S. Norm Sample $(N=8,000)$ |  | 50.0 | 50.0 |
| Australia | 143 | 25.9 | 65.7 |
| Brazil | 191 | 25.1 | 72.3 |
| Canada (English speakers) | 635 | 52.8 | 43.9 |
| Canada (Canadian French speakers) | 962 | 55.6 | 44.4 |
| China, People's Republic of | 370 | 36.5 | 52.4 |
| France | 159 | 24.5 | 56.6 |
| Germany | 215 | 18.1 | 74.4 |
| India | 841 | 14.7 | 67.1 |
| Ireland, Republic of | 124 | 27.4 | 71.8 |
| Italy | 299 | 16.4 | 82.6 |
| Japan | 163 | 23.3 | 68.7 |
| Mexico | 255 | 39.2 | 57.3 |
| New Zealand | 106 | 55.7 | 41.5 |
| Singapore | 109 | 35.8 | 52.3 |
| South Africa | 194 | 36.6 | 61.9 |
| Sweden | 425 | 24.2 | 74.8 |
| United Kingdom | 977 | 59.4 |  |

Note: Some individuals from the Australia, Brazil, Canada (Canadian French speakers), People's Republic of China, France, Germany, India, Republic of Ireland, Italy, Japan, Mexico, New Zealand, Singapore, South Africa, Sweden, and United Kingdom samples did not indicate gender.

All respondents, other than those who completed the Canadian French assessment, responded to a number of demographic items prior to taking the TKI assessment. These items pertained to organizational level, employment status, age, years working in current occupation, and satisfaction with current occupation. Table 3 summarizes the organizational level for the U.S. Norm Sample and each of the countries in the International Sample. All other demographic information is provided in Appendix A.

## Percentile Ranks from the International Sample

Percentiles were calculated for each of the raw scores (0-12). In general terms, percentile values are the cumulative frequency of the raw score-that is, the percentage of people who scored at or below the corresponding raw score. For
example, if a raw score of 6 on Competing had a percentile of $70 \%$, we would infer that $70 \%$ of individuals in the International Sample scored 6 or lower on that conflict mode. (Again, the more precise method used to calculate percentiles for the TKI assessment is described in Appendix H.)

The percentile scores for the International Sample are shown in Table 4. To examine the International Sample percentile scores by country, refer to Appendixes B-F. For comparison purposes, the percentile scores for the U.S. Norm Sample are also included in Tables B-1, C-1, D-1, E-1, and F-1.

When compared with the results presented in Table 1, the percentiles in Table 4 shifted slightly from the U.S. norms on all conflict modes. To interpret these shifts, it is important to understand that a shift toward higher percentile scores tends to indicate that raw scores have declined; that is, percentile

| TABLE 3. ORGANIZATIONAL LEVEL OF THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample | Entry Level \% | Nonsupervisory \% | Supervisory \% | Management \% | Executive \% | Top Management \% |
| U.S. Norm Sample | 5.0 | 20.3 | 19.7 | 35.2 | 14.9 | 5.0 |
| Australia | 1.4 | 15.4 | 11.2 | 51.0 | 7.7 | 1.4 |
| Brazil | 2.1 | 15.7 | 26.7 | 35.1 | 9.4 | 2.6 |
| Canada (English speakers) | 4.4 | 22.4 | 10.7 | 32.6 | 9.0 | 1.6 |
| Canada (Canadian French speakers) | n/a | n/a | n/a | n/a | n/a | n/a |
| China, People's Republic of | 3.5 | 16.8 | 24.9 | 36.8 | 3.0 | 0.0 |
| France | 1.3 | 11.9 | 6.3 | 47.8 | 11.3 | 0.0 |
| Germany | 6.0 | 26.5 | 18.6 | 37.2 | 3.3 | 0.0 |
| India | 2.4 | 6.1 | 15.9 | 43.5 | 3.7 | 1.0 |
| Ireland, Republic of | 0.0 | 21.8 | 8.1 | 54.0 | 3.2 | 0.0 |
| Italy | 1.3 | 17.4 | 27.1 | 47.8 | 1.7 | 0.3 |
| Japan | 1.8 | 25.8 | 30.1 | 23.9 | 2.5 | 0.0 |
| Mexico | 2.7 | 9.8 | 24.7 | 29.4 | 8.2 | 3.5 |
| New Zealand | 16.0 | 43.4 | 13.2 | 19.8 | 2.8 | 0.0 |
| Singapore | 0.0 | 13.8 | 13.8 | 39.4 | 12.8 | 0.9 |
| South Africa | 4.6 | 16.5 | 19.1 | 49.0 | 8.8 | 1.0 |
| Sweden | 0.7 | 11.1 | 16.9 | 68.0 | 0.9 | 0.5 |
| United Kingdom | 1.7 | 11.3 | 8.2 | 46.2 | 8.4 | 1.7 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$.
values for a given raw score increase when a sample has lower raw scores. Some of the more noteworthy shifts on conflict modes include the following. In the Australian sample, the percentiles shifted down on Competing, as the Australian sample scored higher than the U.S. Norm Sample. In contrast, the German sample shifted up on Collaborating, indicating that it had lower raw scores than the U.S. Norm Sample. The Canadian French sample shifted down on Compromising, as it scored higher than the U.S. Norm Sample. A noteworthy change on Avoiding was a shift down in percentile scores for the New Zealand sample. Finally, percentiles on Accommodating shifted up for the Mexican sample, again indicating lower raw scores than those reported for the U.S. Norm Sample.

As with the U.S. Norm Sample, the International Sample was partitioned into three interpretive categories-high (the top

25\%), medium (the middle 50\%), and low (the bottom $25 \%$ ), based on the distribution of the raw scores. Table 5 illustrates the results for each of the five conflict modes. Although the International Sample percentile scores shifted slightly for all conflict modes, the interpretive categories are very similar to those found for the U.S. Norm Sample. Thus, interpretation of TKI results for the U.S. Norm Sample and the International Sample overall remain largely the same. The only differences in raw score ranges between the two samples was on the Collaborating mode, where ranges of 5-8 and 912 were categorized as low and medium, respectively, for the U.S. Norm Sample and ranges of 5-7 and 8-12 were categorized as low and medium, respectively, for the International Sample. Differences on the Collaborating mode may be a function of the organizational level of individuals in the U.S. Norm Sample versus that of those in the International Sample. In the U.S. Norm Sample, $75 \%$ of respondents were

TABLE 4. TKI RAW SCORES AND PERCENTILES FOR THE INTERNATIONAL SAMPLE

|  | Percentile |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Raw Score | Competing | Collaborating | Compromising | Avoiding | Accommodating |
| 0 | 2 | 0 | 0 | 0 | 0 |
| 1 | 6 | 1 | 0 | 2 | 2 |
| 2 | 14 | 3 | 1 | 4 | 8 |
| 3 | 25 | 8 | 3 | 10 | 18 |
| 4 | 39 | 16 | 7 | 19 | 33 |
| 5 | 53 | 29 | 14 | 32 | 49 |
| 6 | 66 | 45 | 26 | 63 | 65 |
| 7 | 77 | 78 | 57 | 77 | 79 |
| 10 | 86 | 99 | 72 | 88 | 89 |
| 11 | 92 | 96 | 96 | 95 | 95 |
| 12 | 96 | 100 | 99 | 98 | 98 |

Note: $N=6,168$. Percentiles are rounded up.

TABLE 5. RAW SCORES AND INTERPRETIVE CATEGORIES FOR THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE

|  | Competing |  | Collaborating |  | Compromising |  | Avoiding |  | Accommodating |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpretive Category | U.S. <br> Norm Sample | Inter- <br> national Sample | U.S. <br> Norm Sample | Inter- <br> national Sample | U.S. <br> Norm <br> Sample | Inter- <br> national Sample | U.S. <br> Norm Sample | Inter- <br> national Sample | U.S. <br> Norm <br> Sample | Inter- <br> national <br> Sample |
| High <br> (top 25\%) | 7-12 | 7-12 | 9-12 | 8-12 | 10-12 | 10-12 | 8-12 | 8-12 | 7-12 | 7-12 |
| Medium (middle 50\%) | 3-6 | 3-6 | 5-8 | 5-7 | 6-9 | 6-9 | 5-7 | 5-7 | 4-6 | 4-6 |
| Low (bottom 25\%) | 0-2 | 0-2 | 0-4 | 0-4 | 0-5 | 0-5 | 0-4 | 0-4 | 0-3 | 0-3 |

Note: Interpretive categories that differ between the U.S. Norm Sample and the International Sample are shaded.
employed as supervisors, managers, executives, or top executives. In contrast, the International Sample had only 56\% of respondents employed as supervisors, managers, executives, or top executives. Previous research (Blake \& Mouton, 1964; Brewer, Mitchell, \& Weber, 2002; Thomas, Thomas, \& Schaubhut, 2008) has indicated that Collaborating increases at higher organizational levels. Given these findings, the shift
in the Collaborating mode in the current study may be attributed to the smaller percentage of individuals in the International Sample who were supervisors or above. Appendixes B-F (Tables B-2, C-2, D-2, E-2, and F-2) provide information on the raw scores and interpretive categories for each of the countries in the International Sample.

|  | Variance <br> Sources | Sum of <br> Squares (SS) | Degrees of <br> Freedom $(\boldsymbol{d} \boldsymbol{f})$ | Mean <br> Square (MS) | $\boldsymbol{F}$ | $\boldsymbol{p}$ | $\boldsymbol{r}^{2}$ |
| :--- | :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TKI Mode | Country | 1597.392 | 17 | 93.964 | 12.629 | .000 | .015 |
| Competing | Error | 105282.718 | 14150 | 7.440 |  |  |  |
| Collaborating | Country | 1016.927 | 17 | 59.819 | 12.628 | .000 | .015 |
| Compromising | Error | 67029.927 | 14150 | 4.737 |  |  |  |
|  | Country | 2825.739 | 17 | 166.220 | 35.543 | .000 | .041 |
| Avoiding | Error | 66174.436 | 14150 | 4.677 |  |  |  |
|  | Country | 1523.324 | 17 | 89.607 | 15.818 | .000 | .019 |
| Accommodating | Error | 80157.322 | 14150 | 5.665 |  |  |  |
|  | Country | 1852.206 | 17 | 108.953 | 22.390 | .000 | .026 |

## ANALYSES OF CONFLICT MODE DIFFERENCES

The analysis of the raw score and percentile distributions show slight differences in the distributions and interpretive boundaries for several countries. However, it is necessary to determine whether these differences are meaningful to users of the TKI assessment. To that end, a series of analyses examined differences in mean scores based on respondents' gender and country.

## Differences by Country

First, univariate analyses of variance (ANOVAs) were calculated to see whether statistically significant differences exist between samples from the 17 countries in our data set (the United States and the 16 countries in the International Sample). ANOVAs compare the mean scores of two or more groups to determine whether there are statistically significant differences between them (Tabachnick \& Fidell, 2001). A summary of this analysis is provided in Table 6, which shows that significant differences between countries were found on all five conflict modes.

Effect sizes were also computed to determine the magnitude of the results. Essentially, effect sizes provide an indication of size differences in a practical sense. While results can be statistically significant, they may not always have an impact in action or when applied in practice-that is, practical significance. Large samples almost always have statistically signifi-
cant differences, so effect sizes are of particular value in this study. Effect sizes computed for the mean differences on the five TKI assessment conflict modes suggest that the differences reported here should be interpreted with caution. The $r^{2}$ effect sizes computed for the ANOVAs (Gravetter \& Wallnau, 2004) were all small to medium (Cohen, 1992). According to Cohen's criteria for effect sizes, country was not shown to have a large impact on any of the five conflict modes.

After the ANOVAs showed statistically significant differences between the 17 countries, post hoc analyses were run to more specifically test differences between the U.S. Norm Sample and the individual countries in the International Sample. Post hoc analyses-that is, the Tukey Honestly Significant Difference tests run here-determine whether one country's mean is significantly higher than another's on each conflict mode. Tukey HSD comparisons between the U.S. Norm Sample and all countries included in the International Sample are provided in Appendixes B-F (Tables B-3, C-3, D-3, E-3, and F-3).

When compared to the U.S. Norm Sample, the Australia, France, Mexico, and United Kingdom samples all scored significantly higher on Competing. Canada (Canadian French speakers), the People's Republic of China, Germany, India, Italy, and Japan all scored significantly lower than the U.S. Norm Sample on Collaborating. On the Compromising conflict mode, Brazil, Canada (Canadian French speakers), France, Germany, and Mexico all scored significantly higher, while India and Japan scored significantly lower. In addition, the People's Republic of China, India, Italy, Japan, and New

TABLE 7. TKI PERCENTILE MEDIANS BY GENDER FOR THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE

|  | Women |  | Men |  |
| :--- | :---: | :---: | :---: | :---: |
| TKI Mode | U.S. Norm Sample |  | International Sample | U.S. Norm Sample |
|  | International Sample |  |  |  |
| Competing | 44 | 39 | 57 | 53 |
| Collaborating | 58 | 45 | 58 | 45 |
| Compromising | 58 | 57 | 41 | 40 |
| Avoiding | 49 | 47 | 49 | 47 |
| Accommodating | 46 | 49 | 46 | 49 |

Note: U.S. Norm Sample $N=8,000$ ( 4,000 women and 4,000 men); International Sample $N=6,168$ (1,983 women and 3,659 men; 526 did not indicate gender).

Zealand all scored significantly higher on Avoiding, whereas Canada (Canadian French speakers), scored significantly lower. Finally, Brazil, France, Mexico, Singapore, South Africa, and the United Kingdom all scored significantly lower on Accommodating. In contrast, the People's Republic of China and Japan scored significantly higher than the U.S. Norm Sample on Accommodating. It should be noted that most differences were found to have small ( $d \leq .20$ ) to medium ( $d \leq .50$ ) effect sizes (i.e., Cohen's $d$ ) according to Cohen's criteria (Cohen, 1992).

## Differences by Gender

Previous research using the U.S. Norm Sample has revealed differences between the scores of men and women on the conflict modes (Thomas, Thomas, \& Schaubhut, 2008). The strongest difference occurred on Competing, where men scored somewhat higher than women-a finding consistent with a meta-analysis of previous findings by various researchers (Holt \& DeVore, 2005). In this international technical brief, we sought to determine whether these same gender patterns occurred in the International Sample.

The International Sample was compared to the U.S. Norm Sample by looking at the median scores obtained for women and men on each of the five conflict modes. Median scores were determined by dividing the distribution of percentile scores in half for both women and men. The medians are the scores in the center of the distribution; exactly one-half of the distribution falls above the median and one-half of the distribution falls below the median. Results are presented in Table 7.

Collaborating percentiles for both women and men show the trend for people in the International Sample to score some-
what lower on Collaborating than people in the U.S. Norm Sample. With that exception, however, median percentiles for both women and men are quite similar across the U.S. and International samples, falling within a few points of each other. In particular, men exhibit moderately higher Competing scores than women in both the U.S. and International samples. Women tend to score somewhat higher than men on Compromising in this analysis. A breakdown of percentile medians for women and men by individual country is presented in Appendix G.

To explore more precisely gender differences by country, independent sample $t$ tests were calculated. Independent sample $t$ tests help to determine whether a significant difference exists between two populations (e.g., women and men) (Gravetter \& Wallnau, 2004). Results are presented in Appendixes B-F (Tables B-4, C-4, D-4, E-4, and F-4). Here, the conventional cutoff value of $p<.05$ was used to determine statistical significance.

As shown in these tables, statistically significant differences were found between women and men on all five conflict modes, with Competing having the largest number of countries to differ by gender. Men scored significantly higher than women on Competing in all countries except Brazil, France, Germany, the Republic of Ireland, Italy, Japan, and Singapore. Gender differences on other conflict modes were less widespread. On Collaborating, women scored higher than men in Germany and Italy, while men scored higher than women in Australia, Canada (English speakers), Canada (Canadian French speakers), and the United Kingdom. On Compromising, women scored higher than men in the U.S. Norm Sample, India, and the Republic of Ireland. On Avoiding, women scored higher than men in the U.S. Norm Sample,

Australia, Canada (English speakers), Canada (Canadian French speakers), Mexico, New Zealand, and the United Kingdom. On Accommodating, women scored higher than men in the U.S. Norm Sample, Australia, Canada (English speakers), New Zealand, and the United Kingdom, while men scored higher than women in Italy.

Again, these results should be interpreted with caution. In calculating effect sizes for the $t$ tests (i.e., Cohen's $d$ ), most gender differences were found to be small $(d \leq .20)$ to medium ( $d \leq .50$ ) according to Cohen's criteria (Cohen, 1992). The only country to have a mean score difference classified as large according to Cohen (1992) was Australia, where women and men differed strongly on the Accommodating mode.

Overall, however, we note that the strongest gender difference found in the International Sample-the tendency for men to score somewhat higher than women on Compet-ing-is common to both the U.S. Norm Sample and the large majority of countries in the International Sample. Among other things, this finding underscores the importance of basing norms on a gender-balanced sample. While the U.S. Norm Sample was based on a 50/50 split of men and women, our samples of convenience for other countries varied considerably with respect to gender composition. These varying percentages of women and men may thus be contributing to differences in means and percentile scores across national samples in this study.

## CONCLUSION

The analyses presented in this document were conducted as an initial investigation of differences in TKI assessment scores across a variety of countries from around the globe. Overall, the pattern of the five conflict modes did not vary greatly across countries or in comparison to the U.S. Norm Sample. Findings appear to confirm that the modes, percentile computations, and scores used for the interpretive categories function similarly in different countries. Thus, results provide some initial support for the cross-cultural use of the instrument.

The mode that appeared to differ the most between the U.S. Norm Sample and the International Sample was Collaborat-
ing. Differences on the Collaborating mode may be a result of the organizational level of individuals in the International Sample. Approximately half of individuals in the International Sample were supervisors, managers, executives, or top executives, in comparison to over two-thirds of individuals in the U.S. Norm Sample. However, as previous research (Blake \& Mouton, 1964; Brewer et al., 2002; Thomas et al., 2008) has suggested that Collaborating increases at higher organizational levels, these results may be impacted by the current work level of the International Sample participants.

While the U.S. Norm Sample was specifically developed to mirror the racial and ethnic distribution of the U.S. workforce, individual international samples included in this analysis are nearly all samples of convenience. The U.S. Norm Sample of 8,000 respondents was drawn, via a stratified random sample, from a much larger pool of 59,000 online respondents. Therefore, the high, middle, and low scores in the U.S. Norm Sample percentiles represent those national demographic features. The international samples, on the other hand, vary in size, with eight countries having fewer than 200 participants. These smaller samples are based on a relatively small number of administrations that tap different industries and occupations. Moreover, samples from different countries differ in their percentages of women and men, which would skew percentiles somewhat. Thus, differences (statistically or practically significant) revealed in these preliminary cultural comparisons may be a result of the different sampling methods employed for the U.S. and International samples.

Nevertheless, this initial examination suggests that, as a practical matter, the U.S. TKI norms (in particular, the high, medium, and low categories) do not diverge strongly from those of the countries in this study. Thus, we conclude that they can be used to interpret results for people of international origin and residence.

It should be noted, however, that broad generalizations to countries or cultures should not be made based on these findings. Future research should be conducted on translated versions of the TKI assessment as they are developed and used around the world, and on samples obtained through more rigorous sampling techniques and representative of the particular populations of interest.

## REFERENCES

Blake, R., \& Mouton, J. S. (1964). The managerial grid. Houston, TX: Gulf.
Brewer, N., Mitchell, P., and Weber, N. (2002). Gender role, organizational status, and conflict management styles. The International Journal of Conflict Management, 13, 78-94.
Cohen, J. (1992). A power primer. Psychological Bulletin, 112(1), 155-159.
Edwards, A. L. (1970). The measurement of personality traits by scales and inventories. New York: Holt, Rinehart \& Winston.
Gravetter, F., \& Wallnau, L. (2004). Statistics for the behavioral sciences (6th ed.). Belmont, CA: Wadsworth.
Holt, J. L., \& DeVore, C. J. (2005). Culture, gender, organizational role, and styles of conflict resolution: A metaanalysis. International Journal of Intercultural Relations, 29(2), 165-196.
Kilmann, R. H., \& Thomas, K. W. (1977). Developing a forced-choice measure of conflict-handling behavior: The MODE instrument. Educational and Psychological

Measurement, 37(2), 309-325. Available for download at www.kilmanndiagnostics.com/developing-forced-choice-measure-conflict-handling-behavior-mode-instrument.
Schaubhut, N. (2007). Technical brieffor the Thomas-Kilmann Conflict Mode Instrument. Mountain View, CA: CPP, Inc.
Tabachnick, B. G., \& Fidell, L. S. (2001). Using multivariate statistics. Needham Heights, MA: Allyn \& Bacon.
Thomas, K. W. (2002). Introduction to conflict management: Improving performance using the TKI. Mountain View, CA: CPP, Inc.
Thomas, K. W., \& Kilmann, R. H. (1974, 2007). ThomasKilmann Conflict Mode Instrument. Mountain View, CA: CPP, Inc.
Thomas, K. W., Thomas, G. F., \& Schaubhut, N. (2008). Conflict styles of men and women at six organization levels. The International Journal of Conflict Management, 19, 148-166.
U.S. Department of Labor, Bureau of Labor Statistics (n.d.). Household data annual averages, table 18. Retrieved August 15, 2006; www.bls.gov/cps/cpsaat18.pdf.

## APPENDIX A: Demographic Information for the U.S. Norm Sample and the International Sample by Country

$\left.\begin{array}{|lccccc|}\hline & & & & & \\ & \text { TABLE A-1. EMPLOYMENT STATUS OF THE U.S. NORM SAMPLE } \\ \text { AND THE INTERNATIONAL SAMPLE BY COUNTRY }\end{array}\right]$

[^0]
## TABLE A-2. DEMOGRAPHIC PROFILE OF THE U.S. NORM SAMPLE

 AND THE INTERNATIONAL SAMPLE BY COUNTRY| Sample | Demographic Item | $n$ | Mean | SD |
| :---: | :---: | :---: | :---: | :---: |
| U.S. Norm Sample ( $N=8,000$ ) | Respondent's age | 8,000 | 40.35 | 9.66 |
|  | Years working in current occupation | 7,989 | 11.75 | 9.45 |
|  | Satisfaction with current job | 7,988 | 1.85 | 0.88 |
| Australia | Respondent's age | 130 | 36.64 | 7.84 |
|  | Years working in current occupation | 127 | 11.06 | 7.78 |
|  | Satisfaction with current job | 131 | 1.98 | 0.84 |
| Brazil | Respondent's age | 188 | 35.86 | 7.14 |
|  | Years working in current occupation | 174 | 11.37 | 7.91 |
|  | Satisfaction with current job | 186 | 1.91 | 0.97 |
| Canada (English speakers) | Respondent's age | 588 | 39.10 | 9.55 |
|  | Years working in current occupation | 515 | 12.48 | 8.63 |
|  | Satisfaction with current job | 594 | 1.79 | 1.13 |
| Canada (Canadian French speakers) | Respondent's age | n/a | n/a | n/a |
|  | Years working in current occupation | n/a | n/a | n/a |
|  | Satisfaction with current job | n/a | n/a | n/a |
| China, People's Republic of | Respondent's age | 349 | 33.49 | 5.41 |
|  | Years working in current occupation | 312 | 8.65 | 5.23 |
|  | Satisfaction with current job | 345 | 2.19 | 0.96 |
| France | Respondent's age | 134 | 36.88 | 7.75 |
|  | Years working in current occupation | 126 | 9.74 | 7.44 |
|  | Satisfaction with current job | 138 | 1.96 | 0.92 |
| Germany | Respondent's age | 205 | 37.01 | 7.96 |
|  | Years working in current occupation | 198 | 9.12 | 8.02 |
|  | Satisfaction with current job | 201 | 2.05 | 0.74 |
| India | Respondent's age | 679 | 33.05 | 6.07 |
|  | Years working in current occupation | 611 | 9.78 | 5.49 |
|  | Satisfaction with current job | 712 | 1.79 | 0.97 |
| Ireland, Republic of | Respondent's age | 117 | 36.85 | 6.02 |
|  | Years working in current occupation | 108 | 11.14 | 7.22 |
|  | Satisfaction with current job | 122 | 2.16 | 1.15 |
| Italy | Respondent's age | 297 | 39.72 | 5.67 |
|  | Years working in current occupation | 285 | 10.68 | 6.50 |
|  | Satisfaction with current job | 293 | 2.46 | 0.94 |
| Japan | Respondent's age | 150 | 39.51 | 7.95 |
|  | Years working in current occupation | 137 | 11.66 | 8.70 |
|  | Satisfaction with current job | 149 | 2.23 | 1.09 |
| Mexico | Respondent's age | 246 | 34.57 | 7.20 |
|  | Years working in current occupation | 200 | 9.37 | 6.83 |
|  | Satisfaction with current job | 239 | 1.64 | 1.03 |
| New Zealand | Respondent's age | 103 | 39.99 | 10.58 |
|  | Years working in current occupation | 101 | 9.90 | 7.92 |
|  | Satisfaction with current job | 105 | 1.98 | 0.81 |
| Singapore | Respondent's age | 97 | 37.48 | 6.46 |
|  | Years working in current occupation | 89 | 11.00 | 5.81 |
|  | Satisfaction with current job | 94 | 2.13 | 0.85 |
| South Africa | Respondent's age | 186 | 37.97 | 7.57 |
|  | Years working in current occupation | 192 | 11.18 | 8.18 |
|  | Satisfaction with current job | 193 | 2.16 | 0.93 |
| Sweden | Respondent's age | 419 | 38.34 | 5.71 |
|  | Years working in current occupation | 416 | 8.34 | 6.16 |
|  | Satisfaction with current job | 422 | 2.08 | 0.80 |
| United Kingdom | Respondent's age | 899 | 38.64 | 9.08 |
|  | Years working in current occupation | 750 | 13.53 | 9.26 |
|  | Satisfaction with current job | 846 | 1.94 | 1.03 |

Note: Satisfaction with current job response options range from $1=$ very satisfied to $6=$ very dissatisfied.
APPENDIX B: Competing Mode by Country

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$,
Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.


[^1]
## TABLE B-3. TUKEY HSD COMPARISONS BETWEEN THE U.S. NORM SAMPLE AND

 THE INTERNATIONAL SAMPLE BY COUNTRY-COMPETING|  | Mean <br> Difference ${ }^{1}$ | Standard <br> Error | $\boldsymbol{p}$ | ${\text { Cohen's } \boldsymbol{d}^{2}}^{\text {Comparison }}$ |
| :--- | :---: | :---: | :---: | :---: |
| U.S. Norm Sample vs. Australia | $-1.126^{*}$ | 0.230 | .000 | -.40 |
| U.S. Norm Sample vs. Brazil | -0.472 | 0.200 | .635 | -.18 |
| U.S. Norm Sample vs. Canada (English speakers) | 0.220 | 0.112 | .889 | .08 |
| U.S. Norm Sample vs. Canada (Canadian French speakers) | 0.189 | 0.093 | .855 | .07 |
| U.S. Norm Sample vs. China, People's Republic of | 0.182 | 0.145 | .999 | .07 |
| U.S. Norm Sample vs. France | $-0.994^{*}$ | 0.218 | .001 | -.37 |
| U.S. Norm Sample vs. Germany | -0.585 | 0.189 | .154 | -.21 |
| U.S. Norm Sample vs. India | -0.281 | 0.099 | .288 | -.10 |
| U.S. Norm Sample vs. Ireland, Republic of | -0.468 | 0.247 | .913 | -.17 |
| U.S. Norm Sample vs. Italy | -0.379 | 0.161 | .640 | -.14 |
| U.S. Norm Sample vs. Japan | 0.317 | 0.216 | .993 | .12 |
| U.S. Norm Sample vs. Mexico | $-0.896^{*}$ | 0.174 | .000 | -.33 |
| U.S. Norm Sample vs. New Zealand | 0.581 | 0.267 | .768 | .21 |
| U.S. Norm Sample vs. Singapore | 0.217 | 0.263 | 1.000 | .08 |
| U.S. Norm Sample vs. South Africa | -0.269 | 0.198 | .997 | -.10 |
| U.S. Norm Sample vs. Sweden | -0.400 | 0.136 | .228 | -.15 |
| U.S. Norm Sample vs. United Kingdom | $-0.906^{*}$ | 0.092 | .000 | -.32 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.
${ }^{1}$ Mean difference is equal to U.S. Norm Sample mean minus individual country sample mean.
${ }^{2}$ Cohen's $d$ was calculated using the means and standard deviations of the U.S. Norm Sample and each of the individual country samples. The formula is as follows: ((U.S. mean - individual country mean)/SQRT(((U.S. std. dev. * U.S. std. dev.) + (individual country std. dev. *individual country std. dev.))/2)). * $p<.05$.

## TABLE B-4. MEAN DIFFERENCES BETWEEN WOMEN AND MEN IN THE U.S. NORM SAMPLE

 AND THE INTERNATIONAL SAMPLE BY COUNTRY-COMPETING| Sample | Women |  | Men |  | $t$ | $p$ | Cohen's d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD |  |  |  |
| U.S. Norm Sample | 4.21 | 2.68 | 5.16 | 2.83 | -15.481* | . 000 | -. 34 |
| Australia | 4.70 | 2.77 | 6.32 | 2.79 | -2.991* | . 003 | -. 58 |
| Brazil | 4.60 | 2.30 | 5.43 | 2.55 | -1.973 | . 050 | -. 34 |
| Canada (English speakers) | 3.84 | 2.69 | 5.22 | 2.65 | -6.369* | . 000 | -. 52 |
| Canada (Canadian French speakers) | 4.23 | 2.43 | 4.83 | 2.58 | -3.671* | . 000 | -. 24 |
| China, People's Republic of | 4.16 | 2.37 | 4.76 | 2.52 | -2.173* | . 030 | -. 25 |
| France | 5.10 | 2.31 | 6.04 | 2.68 | -1.906 | . 059 | -. 38 |
| Germany | 4.67 | 2.68 | 5.47 | 2.60 | -1.718 | . 087 | -. 30 |
| India | 4.35 | 2.53 | 4.92 | 2.56 | -2.280* | . 023 | -. 22 |
| Ireland, Republic of | 4.65 | 2.68 | 5.37 | 2.84 | -1.283 | . 202 | -. 26 |
| Italy | 4.94 | 2.77 | 5.09 | 2.70 | -0.354 | . 723 | -. 05 |
| Japan | 4.53 | 2.60 | 4.29 | 2.46 | 0.494 | . 622 | . 09 |
| Mexico | 4.91 | 2.53 | 6.03 | 2.66 | -3.324* | . 001 | -. 43 |
| New Zealand | 3.34 | 2.36 | 5.16 | 2.66 | -3.667* | . 000 | -. 72 |
| Singapore | 4.28 | 2.70 | 4.53 | 2.62 | -0.443 | . 659 | -. 09 |
| South Africa | 4.35 | 2.34 | 5.32 | 2.76 | -2.470* | . 014 | -. 38 |
| Sweden | 4.41 | 2.37 | 5.32 | 2.46 | -3.291* | . 001 | -. 38 |
| United Kingdom | 5.18 | 2.77 | 5.89 | 2.78 | -3.108* | . 002 | -. 26 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. * $p<.05$.
APPENDIX C: Collaborating Mode by Country

|  | TABLE C-1. RAW SCORES AND PERCENTILES FOR THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY-COLLABORATING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Raw Score |  | $\begin{aligned} & \frac{\pi}{0} \\ & \frac{0}{4} \\ & \frac{n}{4} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \bar{N} \end{aligned}$ |  |  |  | $\begin{aligned} & \underset{\text { © }}{\stackrel{0}{4}} \\ & \underset{\sim}{0} \end{aligned}$ | $\begin{aligned} & \text { ત } \\ & \text { N } \\ & E_{0} \\ & \mathbb{U} \end{aligned}$ | $\begin{aligned} & \text { 증 } \\ & \underline{y} \end{aligned}$ |  | $\frac{\lambda}{ \pm 0}$ | $\begin{aligned} & \sqrt{0} \\ & \frac{0}{0} \\ & \end{aligned}$ | $\begin{aligned} & \stackrel{0}{x} \\ & \stackrel{0}{2} \end{aligned}$ | $\begin{aligned} & 0 \\ & \frac{C}{0} \\ & \frac{0}{0} \\ & N \\ & N \\ & 3 \\ & \mathbb{Z} \end{aligned}$ | 0 0 응 O ㄷ |  | $\begin{aligned} & \frac{c}{d} \\ & \stackrel{0}{0} \\ & \stackrel{y}{0} \end{aligned}$ |  |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| 2 | 3 | 3 | 2 | 4 | 3 | 6 | 2 | 4 | 3 | 2 | 4 | 4 | 1 | 3 | 3 | 1 | 4 | 2 |
| 3 | 7 | 6 | 6 | 8 | 7 | 12 | 8 | 13 | 8 | 6 | 11 | 11 | 4 | 7 | 6 | 3 | 9 | 6 |
| 4 | 15 | 14 | 15 | 15 | 16 | 23 | 19 | 25 | 18 | 11 | 22 | 24 | 12 | 17 | 12 | 9 | 17 | 13 |
| 5 | 26 | 25 | 30 | 26 | 28 | 39 | 34 | 42 | 31 | 21 | 38 | 40 | 25 | 32 | 23 | 20 | 28 | 24 |
| 6 | 41 | 37 | 48 | 41 | 46 | 56 | 51 | 60 | 46 | 36 | 56 | 55 | 43 | 49 | 41 | 34 | 43 | 40 |
| 7 | 58 | 52 | 68 | 57 | 65 | 75 | 69 | 75 | 63 | 57 | 71 | 72 | 62 | 64 | 62 | 48 | 59 | 57 |
| 8 | 74 | 70 | 83 | 72 | 80 | 89 | 84 | 89 | 78 | 76 | 84 | 85 | 77 | 79 | 77 | 64 | 75 | 73 |
| 9 | 87 | 85 | 93 | 84 | 91 | 95 | 94 | 97 | 89 | 87 | 93 | 93 | 90 | 90 | 89 | 82 | 88 | 86 |
| 10 | 95 | 94 | 99 | 92 | 97 | 99 | 99 | 99 | 96 | 94 | 97 | 98 | 97 | 95 | 97 | 93 | 95 | 94 |
| 11 | 99 | 98 | 99 | 97 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 98 | 98 | 98 |
| 12 | 100 | 100 | 99 | 100 | 100 | 100 | 99 | 99 | 100 | 99 | 99 | 99 | 99 | 99 | 100 | 98 | 98 | 100 |

[^2] Kingdom $n=977$. Percentiles are rounded up.

| TABLE C-2. RAW SCORES AND INTERPRETIVE CATEGORIES FOR THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY-COLLABORATING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw Scores |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interpretive Category |  |  | $\begin{aligned} & \frac{\pi}{\overline{0}} \\ & \frac{0}{\hbar} \\ & \frac{1}{2} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \bar{N} \\ & \bar{\sim} \end{aligned}$ |  |  |  | $\because$ 든 준 | त E E E U | - |  | - | $\begin{aligned} & \frac{1}{0} \\ & \stackrel{2}{0} \\ & \stackrel{0}{0} \end{aligned}$ | $\begin{aligned} & \stackrel{0}{x} \\ & \underset{x}{1} \end{aligned}$ | $\begin{gathered} 0 \\ \stackrel{C}{0} \\ \hline 0 \\ 0 \\ N \\ 3 \\ 3 \\ Z \end{gathered}$ | 0 0 O O O © |  | $\begin{aligned} & \frac{c}{0} \\ & \frac{1}{0} \\ & 0 \\ & 3 \\ & i \end{aligned}$ |  |
| High (top 25\%) | 9-12 | 8-12 | 9-12 | 8-12 | 9-12 | 8-12 | 8-12 | 8-12 | 7-12 | 8-12 | 8-12 | 8-12 | 8-12 | 8-12 | 8-12 | 8-12 | 9-12 | 9-12 | 9-12 |
| Medium (middle 50\%) | 5-8 | 5-7 | 6-8 | 5-7 | 5-8 | 5-7 | 5-7 | 5-7 | 4-6 | 5-7 | 6-7 | 5-7 | 5-7 | 6-7 | 5-7 | 6-7 | 6-8 | 5-8 | 6-8 |
| Low (bottom 25\%) | 0-4 | 0-4 | 0-5 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-3 | 0-4 | 0-5 | 0-4 | 0-4 | 0-5 | 0-4 | 0-5 | 0-5 | 0-4 | 0-5 |

[^3]| Comparison | Mean Difference ${ }^{1}$ | Standard Error | $p$ | Cohen's $d^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| U.S. Norm Sample vs. Australia | -0.172 | 0.184 | 1.000 | -. 08 |
| U.S. Norm Sample vs. Brazil | 0.433 | 0.159 | . 367 | . 21 |
| U.S. Norm Sample vs. Canada (English speakers) | -0.039 | 0.090 | 1.000 | -. 02 |
| U.S. Norm Sample vs. Canada (Canadian French speakers) | 0.319* | 0.074 | . 002 | . 15 |
| U.S. Norm Sample vs. China, People's Republic of | 0.923* | 0.116 | . 000 | . 43 |
| U.S. Norm Sample vs. France | 0.593 | 0.174 | . 066 | . 28 |
| U.S. Norm Sample vs. Germany | 1.034* | 0.150 | . 000 | . 50 |
| U.S. Norm Sample vs. India | 0.316* | 0.079 | . 008 | . 14 |
| U.S. Norm Sample vs. Ireland, Republic of | -0.103 | 0.197 | 1.000 | -. 05 |
| U.S. Norm Sample vs. Italy | 0.763* | 0.128 | . 000 | . 35 |
| U.S. Norm Sample vs. Japan | 0.805* | 0.172 | . 000 | . 37 |
| U.S. Norm Sample vs. Mexico | 0.082 | 0.138 | 1.000 | . 04 |
| U.S. Norm Sample vs. New Zealand | 0.344 | 0.213 | . 980 | . 16 |
| U.S. Norm Sample vs. Singapore | 0.091 | 0.210 | 1.000 | . 04 |
| U.S. Norm Sample vs. South Africa | -0.494 | 0.158 | . 147 | -. 23 |
| U.S. Norm Sample vs. Sweden | 0.149 | 0.108 | . 997 | . 07 |
| U.S. Norm Sample vs. United Kingdom | -0.098 | 0.074 | . 998 | -. 04 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.
${ }^{1}$ Mean difference is equal to U.S. Norm Sample mean minus individual country sample mean.
${ }^{2}$ Cohen's $d$ was calculated using the means and standard deviations of the U.S. Norm Sample and each of the individual country samples. The formula is as follows: ((U.S. mean - individual country mean)/SQRT(((U.S. std. dev. * U.S. std. dev.) + (individual country std. dev. *individual country std. dev.))/2)). * $p<.05$.

## TABLE C-4. MEAN DIFFERENCES BETWEEN WOMEN AND MEN IN THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY-COLLABORATING

| Sample | Women |  | Men |  | $t$ | $p$ | Cohen's d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD |  |  |  |
| U.S. Norm Sample | 6.47 | 2.21 | 6.50 | 2.20 | -0.512 | . 608 | -. 01 |
| Australia | 5.84 | 2.19 | 7.00 | 2.21 | -2.712* | . 008 | -. 53 |
| Brazil | 5.96 | 1.88 | 6.07 | 1.89 | -0.338 | . 736 | -. 06 |
| Canada (English speakers) | 6.35 | 2.40 | 6.73 | 2.34 | -2.002* | . 046 | -. 16 |
| Canada (Canadian French speakers) | 6.02 | 2.01 | 6.35 | 2.04 | -2.499* | . 013 | -. 16 |
| China, People's Republic of | 5.76 | 2.05 | 5.41 | 2.04 | 1.530 | . 127 | . 17 |
| France | 6.00 | 1.95 | 5.87 | 1.94 | 0.358 | . 721 | . 07 |
| Germany | 6.36 | 1.80 | 5.28 | 1.93 | 3.191* | . 002 | . 58 |
| India | 6.15 | 2.45 | 6.20 | 2.16 | -0.230 | . 818 | -. 02 |
| Ireland, Republic of | 6.88 | 2.01 | 6.46 | 2.11 | 1.003 | . 318 | . 20 |
| Italy | 6.45 | 2.28 | 5.57 | 2.14 | 2.597* | . 010 | . 40 |
| Japan | 5.84 | 2.15 | 5.63 | 2.15 | 0.516 | . 607 | . 10 |
| Mexico | 6.40 | 1.85 | 6.43 | 2.01 | -0.125 | . 901 | -. 02 |
| New Zealand | 6.02 | 2.06 | 6.25 | 2.25 | -0.545 | . 587 | -. 11 |
| Singapore | 6.46 | 1.65 | 6.37 | 2.23 | 0.223 | . 824 | . 05 |
| South Africa | 6.93 | 2.09 | 7.06 | 2.10 | -0.410 | . 683 | -. 06 |
| Sweden | 6.68 | 2.17 | 6.25 | 2.34 | 1.630 | . 104 | . 19 |
| United Kingdom | 6.24 | 2.03 | 6.82 | 2.17 | -3.336* | . 001 | -. 28 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. * $p<.05$.
APPENDIX D: Compromising Mode by Country

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$,
Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.

| TABLE D-2. RAW SCORES AND INTERPRETIVE CATEGORIES FOR THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY—COMPROMISING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw Scores |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interpretive Category |  |  | $\begin{aligned} & \frac{\pi}{\pi} \\ & \frac{\pi}{4} \\ & \frac{\pi}{3} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \bar{N} \\ & \bar{\sim} \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \frac{0}{0} \\ & \underline{\underline{I}} \end{aligned}$ |  | - | $\begin{aligned} & \stackrel{ᄃ}{0} \\ & \stackrel{0}{0} \\ & \stackrel{\rightharpoonup}{7} \end{aligned}$ | $\begin{aligned} & \stackrel{0}{x} \\ & \underset{x}{x} \end{aligned}$ | $$ | 0 0 0 0 0 0 은 |  |  |  |
| High (top 25\%) | 10-12 | 10-12 | 9-12 | 10-12 | 9-12 | 11-12 | 9-12 | 10-12 | 10-12 | 9-12 | 10-12 | 9-12 | 8-12 | 10- | 9-12 | 10-12 | 9-12 | 9-12 | 9-12 |
| Medium (middle 50\%) | 6-9 | 6-9 | 6-8 | 8-9 | 6-8 | 8-10 | 6-8 | 7-9 | 7-9 | 6-8 | 6-9 | 6-8 | 5-7 | 7-9 | 6-8 | 7-9 | 6-8 | 6-8 | 6-8 |
| Low (bottom 25\%) | 0-5 | 0-5 | 0-5 | 0-7 | 0-5 | 0-7 | 0-5 | 0-6 | 0-6 | 0-5 | 0-5 | 0-5 | 0-4 | 0-6 | 0-5 | 0-6 | 0-5 | 0-5 | 0-5 |

 Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. Interpretive ranges that differ between the U.S. Norm Sample and the International Sample are shaded.

| Comparison | Mean Difference ${ }^{1}$ | Standard Error | $p$ | Cohen's $\mathrm{d}^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| U.S. Norm Sample vs. Australia | 0.282 | 0.182 | . 987 | . 13 |
| U.S. Norm Sample vs. Brazil | -0.944* | 0.158 | . 000 | -. 47 |
| U.S. Norm Sample vs. Canada (English speakers) | -0.003 | 0.089 | 1.000 | . 00 |
| U.S. Norm Sample vs. Canada (Canadian French speakers) | -1.240* | 0.074 | . 000 | -. 59 |
| U.S. Norm Sample vs. China, People's Republic of | 0.271 | 0.115 | . 643 | . 13 |
| U.S. Norm Sample vs. France | -0.635* | 0.173 | . 028 | -. 30 |
| U.S. Norm Sample vs. Germany | -0.527* | 0.149 | . 045 | -. 25 |
| U.S. Norm Sample vs. India | 0.821* | 0.078 | . 000 | . 37 |
| U.S. Norm Sample vs. Ireland, Republic of | -0.126 | 0.196 | 1.000 | -. 06 |
| U.S. Norm Sample vs. Italy | 0.104 | 0.127 | 1.000 | . 05 |
| U.S. Norm Sample vs. Japan | 1.152* | 0.171 | . 000 | . 56 |
| U.S. Norm Sample vs. Mexico | -0.801* | 0.138 | . 000 | -. 38 |
| U.S. Norm Sample vs. New Zealand | 0.281 | 0.211 | . 998 | . 14 |
| U.S. Norm Sample vs. Singapore | -0.505 | 0.209 | . 593 | -. 24 |
| U.S. Norm Sample vs. South Africa | 0.061 | 0.157 | 1.000 | . 03 |
| U.S. Norm Sample vs. Sweden | 0.182 | 0.108 | . 968 | . 08 |
| U.S. Norm Sample vs. United Kingdom | 0.177 | 0.073 | . 591 | . 08 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.
${ }^{1}$ Mean difference is equal to U.S. Norm Sample mean minus individual country sample mean.
${ }^{2}$ Cohen's $d$ was calculated using the means and standard deviations of the U.S. Norm Sample and each of the individual country samples. The formula is as follows: ((U.S. mean - individual country mean)/SQRT(((U.S. std. dev. * U.S. std. dev.) + (individual country std. dev. * individual country std. dev.))/2)).

* $p<.05$.


## TABLE D-4. MEAN DIFFERENCES BETWEEN WOMEN AND MEN IN THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY-COMPROMISING

| Sample | Women |  | Men |  | $t$ | $p$ | Cohen's d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD |  |  |  |
| U.S. Norm Sample | 7.59 | 2.13 | 7.25 | 2.24 | 6.960* | . 000 | . 16 |
| Australia | 7.05 | 2.13 | 7.30 | 2.15 | -0.585 | . 560 | -. 12 |
| Brazil | 8.48 | 1.61 | 8.28 | 1.84 | 0.656 | . 513 | . 12 |
| Canada (English speakers) | 7.56 | 2.07 | 7.24 | 2.32 | 1.832 | . 068 | . 15 |
| Canada (Canadian French speakers) | 8.72 | 1.93 | 8.59 | 2.12 | 1.053 | . 293 | . 06 |
| China, People's Republic of | 7.24 | 2.12 | 7.07 | 2.14 | 0.711 | . 478 | . 08 |
| France | 8.44 | 2.21 | 7.89 | 1.85 | 1.452 | . 149 | . 27 |
| Germany | 8.00 | 1.91 | 7.89 | 1.95 | 0.306 | . 760 | . 06 |
| India | 7.11 | 2.03 | 6.57 | 2.23 | 2.477* | . 013 | . 25 |
| Ireland, Republic of | 8.44 | 2.05 | 7.18 | 2.20 | 2.894* | . 005 | . 59 |
| Italy | 7.51 | 1.96 | 7.28 | 2.35 | 0.645 | . 519 | . 11 |
| Japan | 6.47 | 1.77 | 6.22 | 1.99 | 0.688 | . 493 | . 13 |
| Mexico | 8.13 | 1.91 | 8.29 | 2.00 | -0.645 | . 519 | -. 08 |
| New Zealand | 7.25 | 1.59 | 7.00 | 2.13 | 0.692 | . 490 | . 13 |
| Singapore | 8.18 | 1.83 | 7.88 | 2.07 | 0.735 | . 464 | . 15 |
| South Africa | 7.73 | 2.00 | 7.16 | 2.23 | 1.783 | . 076 | . 27 |
| Sweden | 7.56 | 1.88 | 7.10 | 2.15 | 1.956 | . 051 | . 23 |
| United Kingdom | 7.40 | 2.15 | 7.13 | 2.30 | 1.447 | . 148 | . 12 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. * $p<.05$.
APPENDIX E: Avoiding Mode by Country

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$,
Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.

| TABLE E-2. RAW SCORES AND INTERPRETIVE CATEGORIES FOR THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY—AVOIDING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw Scores |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interpretive Category |  |  | $\begin{aligned} & \frac{.0}{\pi} \\ & \frac{\pi}{4} \\ & \frac{\pi}{4} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \bar{N} \\ & \bar{\sim} \end{aligned}$ |  |  |  | 든 준 | त $\stackrel{1}{0}$ E © U | $\begin{aligned} & \frac{0}{0} \\ & \underline{I} \end{aligned}$ |  | - | $\begin{aligned} & \frac{c}{0} \\ & \stackrel{0}{0} \\ & \end{aligned}$ |  | $\begin{aligned} & 0 \\ & \frac{C}{C} \\ & \frac{0}{\pi} \\ & \mathbb{N} \\ & N \\ & 3 \\ & Z \end{aligned}$ | 0 0 0 O O - | $\begin{aligned} & \frac{0}{U} \\ & \hline 4 \\ & 4 \\ & \frac{1}{4} \\ & 0 \\ & 0 \end{aligned}$ |  |  |
| High (top 25\%) | 8-12 | 8-12 | 8-12 | 8-12 | 8-12 | 8-12 | 9-12 | 8-12 | 8-12 | 9-12 | 8-12 | 9-12 | 9-12 | 8-12 | 9-12 | 9-12 | 8-12 | 8-12 | 8-12 |
| Medium (middle 50\%) | 5-7 | 5-7 | 4-7 | 5-7 | 5-7 | 4-7 | 6-8 | 5-7 | 5-7 | 6-8 | 5-7 | 6-8 | 6-8 | 4-7 | 6-8 | 6-8 | 5-7 | 5-7 | 5-7 |
| Low (bottom 25\%) | 0-4 | 0-4 | 0-3 | 0-4 | 0-4 | 0-3 | 0-5 | 0-4 | 0-4 | 0-5 | 0-4 | 0-5 | 0-5 | 0-3 | 0-5 | 0-5 | 0-4 | 0-4 | 0-4 |

[^4]
## TABLE E-3. TUKEY HSD COMPARISONS BETWEEN THE U.S. NORM SAMPLE AND

 THE INTERNATIONAL SAMPLE BY COUNTRY-AVOIDING|  | Mean <br> Difference ${ }^{1}$ | Standard <br> Error | $\boldsymbol{p}$ | Cohen's $\boldsymbol{d}^{2}$ |
| :--- | :---: | :---: | :---: | :---: |
| Comparison | 0.482 | 0.201 | .608 | .19 |
| U.S. Norm Sample vs. Australia | -0.046 | 0.174 | 1.000 | -.02 |
| U.S. Norm Sample vs. Brazil | -0.048 | 0.098 | 1.000 | -.02 |
| U.S. Norm Sample vs. Canada (English speakers) | $0.513^{*}$ | 0.081 | .000 | .21 |
| U.S. Norm Sample vs. Canada (Canadian French speakers) | $-0.819^{*}$ | 0.127 | .000 | -.38 |
| U.S. Norm Sample vs. China, People's Republic of | 0.231 | 0.191 | .999 | .10 |
| U.S. Norm Sample vs. France | -0.040 | 0.164 | 1.000 | -.02 |
| U.S. Norm Sample vs. Germany | $-0.700^{*}$ | 0.086 | .000 | -.30 |
| U.S. Norm Sample vs. India | 0.185 | 0.215 | 1.000 | .08 |
| U.S. Norm Sample vs. Ireland, Republic of | $-0.891^{*}$ | 0.140 | .000 | -.38 |
| U.S. Norm Sample vs. Italy | $-0.835^{*}$ | 0.188 | .001 | -.37 |
| U.S. Norm Sample vs. Japan | 0.397 | 0.151 | .435 | .17 |
| U.S. Norm Sample vs. Mexico | $-1.065^{*}$ | 0.233 | .001 | -.45 |
| U.S. Norm Sample vs. New Zealand | -0.676 | 0.230 | .227 | -.30 |
| U.S. Norm Sample vs. Singapore | -0.101 | 0.173 | 1.000 | -.04 |
| U.S. Norm Sample vs. South Africa | 0.077 | 0.118 | 1.000 | .03 |
| U.S. Norm Sample vs. Sweden | 0.159 | 0.081 | .884 | .07 |
| U.S. Norm Sample vs. United Kingdom |  |  |  |  |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.
${ }^{1}$ Mean difference is equal to U.S. Norm Sample mean minus individual country sample mean.
${ }^{2}$ Cohen's $d$ was calculated using the means and standard deviations of the U.S. Norm Sample and each of the individual country samples. The formula is as follows: ((U.S. mean - individual country mean)/SQRT(((U.S. std. dev. * U.S. std. dev.) + (individual country std. dev. *individual country std. dev.))/2)). * $p<.05$.

## TABLE E-4. MEAN DIFFERENCES BETWEEN WOMEN AND MEN IN THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY-AVOIDING

| Sample | Women |  | Men |  | $t$ | $p$ | Cohen's d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD |  |  |  |
| U.S. Norm Sample | 6.19 | 2.46 | 5.91 | 2.39 | 5.250* | . 000 | . 12 |
| Australia | 6.27 | 2.75 | 5.23 | 2.61 | 2.017* | . 046 | . 39 |
| Brazil | 6.56 | 2.12 | 5.91 | 2.24 | 1.756 | . 081 | . 30 |
| Canada (English speakers) | 6.32 | 2.41 | 5.86 | 2.37 | 2.354* | . 019 | . 19 |
| Canada (Canadian French speakers) | 5.82 | 2.62 | 5.18 | 2.19 | 4.033* | . 000 | . 27 |
| China, People's Republic of | 6.93 | 1.91 | 6.94 | 1.86 | -0.058 | . 954 | -. 01 |
| France | 5.87 | 2.09 | 5.72 | 2.14 | 0.367 | . 714 | . 07 |
| Germany | 5.54 | 2.14 | 6.15 | 2.31 | -1.502 | . 135 | -. 27 |
| India | 6.99 | 2.35 | 6.74 | 2.24 | 1.104 | . 270 | . 11 |
| Ireland, Republic of | 5.74 | 2.72 | 5.93 | 2.32 | -0.402 | . 689 | -. 08 |
| Italy | 6.65 | 2.46 | 7.00 | 2.27 | -0.951 | . 343 | -. 15 |
| Japan | 6.82 | 2.10 | 7.04 | 1.93 | -0.593 | . 554 | -. 11 |
| Mexico | 6.29 | 2.34 | 5.26 | 2.32 | 3.407* | . 001 | . 44 |
| New Zealand | 7.49 | 2.35 | 6.57 | 2.07 | 2.072* | . 041 | . 42 |
| Singapore | 6.87 | 2.04 | 6.60 | 2.03 | 0.650 | . 517 | . 13 |
| South Africa | 6.28 | 2.02 | 6.02 | 2.18 | 0.835 | . 405 | . 12 |
| Sweden | 5.77 | 2.12 | 6.05 | 2.09 | -1.190 | . 235 | -. 13 |
| United Kingdom | 6.10 | 2.45 | 5.67 | 2.41 | 2.174* | . 030 | . 18 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. * $p<.05$.
APPENDIX F: Accommodating Mode by Country

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$,
Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.

| TABLE F-2. RAW SCORES AND INTERPRETIVE CATEGORIES FOR THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY—ACCOMMODATING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw Scores |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interpretive Category | $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{E} \\ & 0 \\ & 0 \\ & \vdots \\ & 0 \\ & \vdots \\ & 0 \\ & \vdots \\ & \vdots \end{aligned}$ |  | $\begin{aligned} & \frac{.0}{\frac{0}{0}} \\ & \frac{0}{4} \\ & \frac{n}{2} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \bar{N} \\ & \bar{\sim} \end{aligned}$ |  |  |  | U 든 는 | $\begin{aligned} & \text { त } \\ & \text { © } \\ & \text { E } \\ & \text { U } \\ & \text { U } \end{aligned}$ | $\begin{aligned} & \text { 음 } \\ & \underline{I} \end{aligned}$ |  | $\xrightarrow{70}$ | $\begin{aligned} & \frac{C}{0} \\ & \frac{2}{0} \\ & \stackrel{0}{7} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{x} \\ & \stackrel{\text { U }}{2} \end{aligned}$ | $\begin{gathered} 0 \\ \stackrel{C}{C} \\ \frac{0}{0} \\ 0 \\ N \\ 3 \\ 0 \\ Z \end{gathered}$ | 0 O O O O in |  | $\begin{aligned} & \frac{C}{0} \\ & \frac{1}{0} \\ & 1 \\ & 3 \\ & i \end{aligned}$ |  |
| High (top 25\%) | 7-12 | 7-12 | 7-12 | 6-12 | 8-12 | 7-12 | 8-12 | 7-12 | 7-12 | 8-12 | 7-12 | 7-12 | 8-12 | 6-12 | 7-12 | 7-12 | 6-12 | 7-12 | 7-12 |
| Medium (middle 50\%) | 4-6 | 4-6 | 4-6 | 3-5 | 4-7 | 4-6 | 5-7 | 4-6 | 4-6 | 4-7 | 4-6 | 4-6 | 5-7 | 3-5 | 3-6 | 3-6 | 3-5 | 4-6 | 4-6 |
| Low (bottom 25\%) | 0-3 | 0-3 | 0-3 | 0-2 | 0-3 | 0-3 | 0-4 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-4 | 0-2 | 0-2 | 0-2 | 0-2 | 0-3 | 0-3 |

[^5]
## TABLE F-3. TUKEY HSD COMPARISONS BETWEEN THE U.S. NORM SAMPLE AND

 THE INTERNATIONAL SAMPLE BY COUNTRY-ACCOMMODATING|  | Mean <br> Difference ${ }^{1}$ | Standard <br> Error | $\boldsymbol{p}$ | Cohen's $\boldsymbol{d}^{2}$ |
| :--- | :---: | :---: | :---: | :---: |
| Comparison | 0.534 | 0.186 | .270 | .24 |
| U.S. Norm Sample vs. Australia | $1.029^{*}$ | 0.162 | .000 | .48 |
| U.S. Norm Sample vs. Brazil | -0.131 | 0.091 | .994 | -.06 |
| U.S. Norm Sample vs. Canada (English speakers) | 0.219 | 0.075 | .249 | .10 |
| U.S. Norm Sample vs. Canada (Canadian French speakers) | $-0.557^{*}$ | 0.117 | .000 | .25 |
| U.S. Norm Sample vs. China, People's Republic of | $0.806^{*}$ | 0.177 | .001 | .38 |
| U.S. Norm Sample vs. France | 0.117 | 0.152 | 1.000 | .05 |
| U.S. Norm Sample vs. Germany | -0.156 | 0.080 | .893 | -.07 |
| U.S. Norm Sample vs. India | 0.512 | 0.200 | .479 | .24 |
| U.S. Norm Sample vs. Ireland, Republic of | 0.403 | 0.130 | .156 | .19 |
| U.S. Norm Sample vs. Italy | $-1.438^{*}$ | 0.175 | .000 | -.62 |
| U.S. Norm Sample vs. Japan | $1.218^{*}$ | 0.140 | .000 | .57 |
| U.S. Norm Sample vs. Mexico | -0.141 | 0.216 | 1.000 | -.07 |
| U.S. Norm Sample vs. New Zealand | $0.873^{*}$ | 0.213 | .005 | .37 |
| U.S. Norm Sample vs. Singapore | $0.802^{*}$ | 0.160 | .000 | .37 |
| U.S. Norm Sample vs. South Africa | -0.008 | 0.110 | 1.000 | .00 |
| U.S. Norm Sample vs. Sweden | $0.667^{*}$ | 0.075 | .000 | .31 |
| U.S. Norm Sample vs. United Kingdom |  |  |  |  |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up.
${ }^{1}$ Mean difference is equal to U.S. Norm Sample mean minus individual country sample mean.
${ }^{2}$ Cohen's $d$ was calculated using the means and standard deviations of the U.S. Norm Sample and each of the individual country samples. The formula is as follows: ((U.S. mean - individual country mean)/SQRT(((U.S. std. dev. * U.S. std. dev.) + (individual country std. dev. *individual country std. dev.))/2)). * $p<.05$.

## TABLE F-4. MEAN DIFFERENCES BETWEEN WOMEN AND MEN IN THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY-ACCOMMODATING

| Sample | Women |  | Men |  | $t$ | $p$ | Cohen's d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD |  |  |  |
| U.S. Norm Sample | 5.54 | 2.26 | 5.18 | 2.20 | 7.108* | . 000 | . 16 |
| Australia | 6.14 | 2.03 | 4.15 | 1.95 | 5.197* | . 000 | 1.00 |
| Brazil | 4.40 | 2.27 | 4.31 | 1.99 | 0.243 | . 808 | . 04 |
| Canada (English speakers) | 5.93 | 2.38 | 4.95 | 2.17 | 5.294* | . 000 | . 43 |
| Canada (Canadian French speakers) | 5.21 | 2.14 | 5.06 | 2.25 | 1.036 | . 300 | . 07 |
| China, People's Republic of | 5.91 | 2.23 | 5.82 | 2.25 | 0.364 | . 716 | . 04 |
| France | 4.59 | 1.65 | 4.48 | 2.03 | 0.304 | . 762 | . 06 |
| Germany | 5.44 | 2.26 | 5.21 | 2.03 | 0.602 | . 548 | . 11 |
| India | 5.40 | 2.44 | 5.55 | 2.19 | -0.719 | . 472 | -. 06 |
| Ireland, Republic of | 4.29 | 1.82 | 5.06 | 2.16 | -1.827 | . 070 | -. 39 |
| Italy | 4.45 | 2.02 | 5.06 | 1.97 | -1.990* | . 048 | -. 31 |
| Japan | 6.34 | 2.32 | 6.81 | 2.44 | -1.041 | . 300 | -. 20 |
| Mexico | 4.27 | 1.96 | 3.98 | 2.09 | 1.097 | . 274 | . 14 |
| New Zealand | 5.90 | 2.06 | 5.02 | 2.05 | 2.139* | . 035 | . 43 |
| Singapore | 4.21 | 2.46 | 4.63 | 2.57 | -0.811 | . 419 | -. 17 |
| South Africa | 4.70 | 2.23 | 4.45 | 2.02 | 0.807 | . 421 | . 12 |
| Sweden | 5.58 | 2.19 | 5.28 | 1.90 | 1.365 | . 173 | . 15 |
| United Kingdom | 5.08 | 2.25 | 4.49 | 2.04 | 3.447* | . 001 | . 27 |

Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. * $p<05$.
APPENDIX G: Percentile Medians for Women and Men in the
U.S. Norm Sample and the International Sample by Country

| TABLE G-1. TKI PERCENTILE MEDIANS FOR WOMEN IN THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TKI Mode | Women-Percentile Median |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | U.S. Norm Sample | $\begin{aligned} & \frac{.0}{\sigma} \\ & \frac{\pi}{4} \\ & \frac{5}{4} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \bar{N} \\ & \bar{N} \end{aligned}$ |  |  |  | $\underset{U}{©}$ 든 | $$ | $\begin{aligned} & \text { 음 } \\ & \underline{\underline{I}} \end{aligned}$ |  | $\begin{aligned} & \frac{\lambda}{\pi} \\ & \pm \end{aligned}$ | $\begin{aligned} & \frac{ᄃ}{0} \\ & \stackrel{0}{0} \\ & \stackrel{0}{7} \end{aligned}$ | $\begin{aligned} & \stackrel{0}{x} \\ & \stackrel{0}{2} \\ & \hline \end{aligned}$ | 0 0 0 0 0 $N$ N 3 2 | 0 0 응 0 0 in | e | $\begin{aligned} & \frac{C}{d} \\ & \frac{0}{0} \\ & \text { U } \\ & \sim \end{aligned}$ |  |
| Competing | 44 | 39 | 53 | 25 | 39 | 39 | 53 | 39 | 39 | 39 | 53 | 46 | 53 | 25 | 39 | 39 | 39 | 53 |
| Collaborating | 58 | 29 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 63 | 63 | 45 | 45 | 45 | 45 | 63 | 63 | 45 |
| Compromising | 58 | 40 | 72 | 57 | 72 | 40 | 72 | 57 | 40 | 72 | 57 | 40 | 57 | 40 | 57 | 57 | 40 | 40 |
| Avoiding | 49 | 47 | 63 | 47 | 47 | 63 | 32 | 47 | 63 | 47 | 63 | 63 | 55 | 77 | 63 | 47 | 47 | 47 |
| Accommodating | 46 | 65 | 41 | 65 | 49 | 65 | 49 | 65 | 49 | 33 | 33 | 72 | 33 | 65 | 33 | 33 | 65 | 49 |

[^6] $n=198$.

| TABLE G-2. TKI PERCENTILE MEDIANS FOR MEN IN THE U.S. NORM SAMPLE AND THE INTERNATIONAL SAMPLE BY COUNTRY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men-Percentile Median |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TKI Mode | U.S. Norm Sample | $\begin{aligned} & \frac{\pi}{\sigma} \\ & 0 \\ & \frac{\pi}{4} \\ & \frac{1}{4} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \bar{N} \\ & \bar{\sim} \end{aligned}$ |  |  |  | © 든 는 |  | $\begin{aligned} & \text { 즘 } \\ & \underline{\underline{I}} \end{aligned}$ |  | $\xrightarrow{7}$ | $\begin{aligned} & \frac{c}{0} \\ & \stackrel{0}{0} \\ & \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{x} \\ & \underset{x}{\infty} \end{aligned}$ | $\begin{gathered} 0 \\ \stackrel{C}{0} \\ 0 \\ \hline 0 \\ \text { N } \\ 3 \\ 3 \\ 2 \end{gathered}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { O } \\ & \text { O } \end{aligned}$ | eग!̣fヲ पłnos | $\begin{aligned} & \frac{c}{む} \\ & \frac{1}{0} \\ & \text { ¿ } \\ & \text { U } \end{aligned}$ |  |
| Competing | 57 | 66 | 53 | 53 | 53 | 53 | 66 | 53 | 53 | 53 | 53 | 39 | 66 | 53 | 39 | 53 | 53 | 66 |
| Collaborating | 58 | 63 | 45 | 63 | 45 | 37 | 45 | 29 | 45 | 63 | 29 | 45 | 45 | 45 | 63 | 63 | 45 | 63 |
| Compromising | 41 | 40 | 57 | 40 | 72 | 40 | 57 | 57 | 40 | 40 | 57 | 26 | 57 | 40 | 57 | 40 | 40 | 40 |
| Avoiding | 49 | 32 | 47 | 47 | 32 | 63 | 32 | 47 | 63 | 47 | 63 | 63 | 32 | 47 | 63 | 47 | 47 | 47 |
| Accommodating | 46 | 33 | 33 | 49 | 49 | 65 | 33 | 49 | 65 | 49 | 49 | 79 | 33 | 49 | 49 | 33 | 49 | 33 |

[^7]
## APPENDIX H: Calculation of Percentile Scores

Percentile scores are not calculated as simple (unadjusted) cumulative frequencies on the TKI as is often done on other instruments. Rather, percentile scores are calculated as the median point (or middle) of the range of cumulative frequency covered by that score. For example, if a raw score of 5 has a cumulative frequency of $40 \%$ and a score of 6 has a cumulative frequency of $60 \%$, then a raw score of 6 would be
seen as covering the range from $40 \%$ to $60 \%$ and the percentile assigned would be the median value of $50 \%$. If this adjustment were not made (and simple cumulative frequencies were used to determine percentile scores), percentile scores would be biased in an upward direction. Among other things, this would mean that more than $25 \%$ of people would be expected to fall into the "top $25 \%$ " range on a given conflict mode, while fewer than $25 \%$ percent of people would be expected to fall into the "bottom $25 \%$ " range.


[^0]:    Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$.

[^1]:    Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. Interpretive ranges that differ between the U.S. Norm Sample and the International Sample are shaded.

[^2]:    Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$,
    Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United

[^3]:    Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. Interpretive ranges that differ between the U.S. Norm Sample and the International Sample are shaded.

[^4]:    Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. Interpretive ranges that differ between the U.S. Norm Sample and the International Sample are shaded.

[^5]:    Note: U.S. Norm Sample $N=8,000$, Australia $n=143$, Brazil $n=191$, Canada (English speakers) $n=635$, Canada (Canadian French speakers) $n=962$, People's Republic of China $n=370$, France $n=159$, Germany $n=215$, India $n=841$, Republic of Ireland $n=124$, Italy $n=299$, Japan $n=163$, Mexico $n=255$, New Zealand $n=106$, Singapore $n=109$, South Africa $n=194$, Sweden $n=425$, United Kingdom $n=977$. Percentiles are rounded up. Interpretive ranges that differ between the U.S. Norm Sample and the International Sample are shaded.

[^6]:    Note: U.S. Norm Sample $n=4,000$, Australia $n=37$, Brazil $n=48$, Canada (English speakers) $n=335$, Canada (Canadian French speakers) $n=535$, People's Republic of China $n=135$, France $n=39$,
    Germany $n=39$, India $n=124$, Republic of Ireland $n=34$, Italy $n=49$, Japan $n=38$, Mexico $n=100$, New Zealand $n=59$, Singapore $n=39$, South Africa $n=71$, Sweden $n=103$, United Kingdom

[^7]:    Note: U.S. Norm Sample $n=4,000$, Australia $n=94$, Brazil $n=138$, Canada (English speakers) $n=279$, Canada (Canadian French speakers) $n=427$, People's Republic of China $n=194$, France $n=90$, Germany $n=160$, India $n=564$, Republic of Ireland $n=89$, Italy $n=247$, Japan $n=112$, Mexico $n=146$, New Zealand $n=44$, Singapore $n=57$, South Africa $n=120$, Sweden $n=318$, United Kingdom

