

## **Interview on Emotional Experience**

Grade 1/Year 2

Fast Track Project Technical Report

Cynthia Rains

September 1, 2005

### **Table of Contents**

- I. Scale Description
- II. Report Sample
- III. Scaling
- IV. Differences between Groups
- V. Recommendations for Use
- VI. Item and Scale Means and SDs
- VII. Subscale Correlations

### **Appendix**

SAS scoring program

### **Citations**

#### *Instrument*

Conduct Problems Prevention Research Group (CPPRG). (1991). *Interview on Emotional Experience* [On-line]. Available: <http://www.fasttrackproject.org>

#### *Reports*

Rains, C. (2003). *Interview on Emotional Experience*. (Fast Track Project Technical Report). Available from the Fast Track Project website: <http://www.fasttrackproject.org>

Haynes, K. (1996). *Interview on Emotional Experience*. (Fast Track Project Technical Report). Nashville, TN: Vanderbilt University.

Haynes, K. (1995). *Interview on Emotional Experience*. (Fast Track Project Technical Report). Nashville, TN: Vanderbilt University.

### **Data Sources**

*Raw:* C2Bex

*Scored:* IEE2

### **I. Scale Description**

The Interview on Emotional Experience is a 22-item measure given to children as part of the summer interview for the first four years of the study. The measure focuses on four emotions—happiness, sadness, anger, and worry. For each emotion, the child is asked several questions about the emotion and the interviewer then codes the child's responses. The first question the child is asked for each emotion is, "What kinds of things make you feel ... (happy, sad, angry, worried)?" The interviewer prompts the child for two examples/responses for this question and then codes each response as appropriate, inappropriate, or no response. The second question the child is asked for each emotion is, "When you are feeling ... (happy, sad, angry, worried), what kinds of things do you do?" The interviewer prompts the child for two responses for this question and then codes each response as one of the following: no response (0), physically aggressive (1), verbally aggressive (2), avoidant/passive (3), affective display (4), communication with adult (5), communication with peer (6), self-control (7), prosocial (8), or doing things/other (9). Finally, for the emotions sad, angry, and worried, the child is asked, "If you saw another kid in your class looking ... (sad, angry, worried), what would you do?" Again the interviewer prompts the child for two responses and then codes the responses using the same scale (0-9) as for the

second question. This results in a total of four possible responses for happiness (two responses each for questions one and two only) and six possible responses each for sadness, anger, and worry (two responses each for all three questions).

## II. Report Sample

These analyses were conducted on the first cohort on the high-risk control sample (n = 155) and the normative sample (n = 387 with overlap, total N = 463) from the second year of the study. Thirty-two records were missing the complete measure. Eight records were missing from the high-risk control sample (4 from Durham and 4 from Washington) and 25 records were missing from the normative sample (3 from Durham, 7 from Nashville, 3 from Pennsylvania, and 12 from Washington). These numbers may reflect some overlap between the two samples.

## III. Scaling

There are numerous ways that the IEE can be analyzed, including conducting separate analyses on each question, or by each emotion. Because of the high number of “no responses” to the second request/prompt for each question, it is recommended that the first response to each question be considered in the analyses of this instrument.

A number of scores and several scales are calculated as part of the IEE. The original response coding (0-9) for each item was transformed into a set of 10 dichotomous variables. First, a score is computed for each child in each of the response categories across the second and third questions by summing the number of times a child had a response for a category, resulting in 10 scores for the child (no response, physically aggressive, verbally aggressive, avoidant/passive, affective display, communication with adult, communication with peer, self-control, prosocial, or doing things/other). The child's score for each of these categories ranges from 0 to 7, with 0 being a low score (indicating that no response fit the category) and 7 being a high score (indicating that all of the child's responses fit the category), since only the first response to each question is included in the scoring program (this would then include the second question about happiness and the second and third questions about sadness, anger, and worry). A score of zero for one of these categories would indicate that the child gave responses that did not fit into that category (for example, the child might not have used any responses indicating the use of verbal aggression), while a score of 7 would indicate that the child used a particular type of response often (for example, the child might have used responses that showed communication with their peers when dealing with all of their emotions).

In addition, an *Appropriateness Score* is calculated by summing the number of times a child described an appropriate response for the emotion for the first question, “What kinds of things make you feel...?” This score can range from 0 to 4 since only the first response for each emotion was included in the scoring program. A standardized *Appropriateness Score* was also created because the standard deviation among the four items that make up the scale showed great variation for both the high-risk sample and the normative sample. Even with the standardization of the score, there was still some variation among the standard deviation of these items because the standardization was done on the full sample, and the variances differed somewhat by high-risk status. To create the standardized score, the items were first standardized with a mean of zero and a standard deviation of one, and then the mean was calculated as the score.

As there was almost no variation on the score for Happy (over 95% of the responses were correct), a second *Appropriateness Score*, *Appropriateness Score without the Happiness Item*, was created to include only responses for angry, sad, and worried. This score can range from 0 to 3. A standardized score was also created for this scale.

Finally, several scales are created as well by summing together two of the category scores and taking their mean. The scales include the *Aggression Scale* (Physical Aggression Score + Verbal Aggression Score), the *Communication Scale* (Communication with Adults Score + Communication with Peers Score), and the *Positive Response Scale* (Prosocial Score + Self-Control Score). These three scales have a range of 0 to 7.

Cronbach's alphas were calculated for each score and can be seen in the following table:

| Subscales   | Cronbach's Alpha         |                  |
|---|--------------------------|------------------|
|   | High-Risk Control Sample | Normative Sample |
| No Response score IEE Y2 (IEE2NRS)                                  | .69                      | .60              |
| Physical Aggression score IEE Y2 (IEE2PAG)                          | .37                      | .24              |
| Verbal Aggression score IEE Y2 (IEE2VAG)                            | .12                      | -.06             |
| Avoidant/Passive score IEE Y2 (IEE2APS)                             | .51                      | .41              |
| Affective Display score IEE Y2 (IEE2ADS)                            | .53                      | .51              |
| Communication w/Adults score IEE Y2 (IEE2CWA)                       | .32                      | .45              |
| Communication w/Peers score IEE Y2 (IEE2CWP)                        | .08                      | .11              |
| Self-Control score IEE Y2 (IEE2SCS)                                 | -.05                     | .19              |
| Prosocial score IEE Y2 (IEE2PSS)                                    | .44                      | .45              |
| Do Nothing score IEE Y2 (IEE2DNS)                                   | .30                      | .40              |
| Aggression Scale IEE Y2 (IEE2AGG)                                   | .27                      | .13              |
| Communication Scale IEE Y2 (IEE2COM)                                | .30                      | .34              |
| Positive Response Scale IEE Y2 (IEE2PRS)                            | .42                      | .44              |
| Appropriateness Score IEE Y2 (IEE2ASC)                              | -.03                     | .61              |
| Appropriateness Score Standardized Y2 (IEE2ASCz)                    | -.03                     | .62              |
| Appropriateness Score w/o Happiness Item IEE Y2 (IEE2AS2)           | -.03                     | .44              |
| Appropriateness Score Standardized w/o Happiness Item Y2 (IEE2AS2z) | -.03                     | .46              |

Given that there were more possible response scores (9) than there were questions (8), and some responses were rarely used, it is not surprising that the response scores do not have high internal consistency. Further, it might be expected that one would do something differently under conditions of happiness and anger, for example. Only one score, the *No Response Score*, showed an adequate internal reliability for both the normative and the high-risk control samples. The *Appropriateness Score* and the *Appropriateness Standardized Score* showed adequate internal reliabilities for the normative sample only.

#### IV. Differences between Groups

A series of t-tests between the high-risk control sample (not including the overlap) and the normative sample indicated significant differences for four scores: the *No Response Score*, the *Positive Response Scale*, the *Communication with Peers Score*, and the *Prosocial Score*. For three of these scores--the *Positive Response Scale*, the *Communication with Peers Score*, and the *Prosocial Score*—the mean for the normative sample was greater than the mean for the control sample. For the *No Response Score*, the mean for the control sample was greater than that of the normative sample.

The *Self-Control Score* approached significance ( $p = .09$ ), with the normative sample scoring a higher mean than that of the control sample.

| Comparison of Means for Normative and Control for IEE Year 2 |  |           |         |         |         |     |         |         |
|--|--|-----------|---------|---------|---------|-----|---------|---------|
| Variable   | Label  | Normative |         | Control |         | DF  | t Value | Pr >  t |
|  |  | Mean      | Std Dev | Mean    | Std Dev |     |         |         |
| IEE2NRS  | No Response score IEE Y2                                     | 0.37      | 0.81    | 0.66    | 1.24    | 436 | 3.01    | 0.0028  |
| IEE2PAG  | Physical Aggression score IEE Y2                             | 0.28      | 0.56    | 0.36    | 0.67    | 436 | 1.37    | 0.1721  |
| IEE2VAG  | Verbal Aggression score IEE Y2                               | 0.07      | 0.26    | 0.08    | 0.29    | 436 | 0.23    | 0.8186  |
| IEE2APS  | Avoidant/Passive score IEE Y2                                | 0.83      | 0.98    | 0.94    | 1.18    | 436 | 1.02    | 0.3083  |
| IEE2ADS  | Affective Display score IEE Y2                               | 0.82      | 1.08    | 0.65    | 1.02    | 436 | -1.56   | 0.1199  |
| IEE2CWA  | Communication w/Adults score IEE Y2                          | 0.73      | 1.05    | 0.66    | 0.89    | 436 | -0.76   | 0.4477  |
| IEE2CWP  | Communication w/Peers score IEE Y2                           | 0.19      | 0.44    | 0.09    | 0.31    | 436 | -2.44   | 0.0153  |
| IEE2SCS  | Self-Control score IEE Y2                                    | 0.13      | 0.38    | 0.07    | 0.25    | 436 | -1.73   | 0.0852  |
| IEE2PSS  | Prosocial score IEE Y2                                       | 2.26      | 1.13    | 1.94    | 1.22    | 436 | -2.75   | 0.0062  |
| IEE2DNS  | Do Nothing score IEE Y2                                      | 1.24      | 1.11    | 1.31    | 1.04    | 436 | 0.68    | 0.4964  |
| IEE2AGG  | Aggression Scale IEE Y2                                      | 0.18      | 0.30    | 0.22    | 0.36    | 436 | 1.38    | 0.1687  |
| IEE2COM  | Communication Scale IEE Y2                                   | 0.46      | 0.56    | 0.37    | 0.48    | 436 | -1.63   | 0.1030  |
| IEE2PRS  | Positive Response Scale IEE Y2                               | 1.19      | 0.62    | 1.00    | 0.64    | 436 | -3.03   | 0.0026  |
| IEE2ASC  | Appropriateness Score IEE Y2                                 | 3.72      | 0.68    | 3.65    | 0.80    | 436 | -1.04   | 0.2978  |
| IEE2ASCz   | Appropriateness Score Standardized Y2                        | -0.00     | 0.71    | 0.08    | 0.33    | 426 | 1.33    | 0.1828  |
| IEE2AS2  | Appropriateness Score without Happiness Item IEE Y2          | 2.76      | 0.58    | 2.68    | 0.69    | 436 | -1.19   | 0.2332  |
| IEE2AS2z   | Appropriateness Score Standardized without Happiness Item Y2 | 0.02      | 0.67    | 0.07    | 0.47    | 422 | 0.83    | 0.4072  |

## V. Recommendations for Use

Users of the *Interview on Emotional Experience* measure should note that there are reliability problems for almost every scale for both the normative and the high-risk control samples. Only one score, the *No Response Score*, showed an adequate internal reliability for both the normative ( $\alpha = .60$ ) and the high-risk control ( $\alpha = .69$ ) samples. The *Appropriateness Score* ( $\alpha = .61$ ) and the *Appropriateness Standardized Score* ( $\alpha = .62$ ) showed adequate internal reliability for the normative sample only. The reliabilities for the other scores for the normative sample ranged from  $-.06$  to  $.51$ . For the high-risk control sample, the reliabilities ranged from  $-.03$  to  $.53$ .

Analysts should note that three scores showed a normal distribution for both the normative and the high-risk control samples: the *Positive Response Scale*, the *Do Nothing Score*, and the *Prosocial Score*. The *Appropriateness Score*, the *Appropriateness Score Standardized*, the *Appropriateness Score without the Happiness Item*, and the *Appropriateness Score Standardized without the Happiness Item* were negatively skewed for both samples. All of the other scores were positively distributed for both the normative and the high-risk control samples.

A number of scores showed floor effects. They included: the *No Response Score* (with 66% of the high-risk control sample and 75% of the normative sample scoring a 0), the *Physical Aggression Score* (with 72% of the high-risk control sample and 75% of the normative sample scoring a 0), the *Verbal Aggression Score* (with 93% of the high-risk control sample and the 93% of the normative sample scoring a 0), the *Affective Display Score* (with 62% of the high-risk control sample and 54% of the normative sample scoring a 0), the *Communication with Peers Score* (with 91% of the high-risk control sample and 85% of

the normative sample scoring a 0), and the *Self-Control Score* (with 93% of the high-risk control sample and 90% of the normative sample scoring a 0).

The *Aggression Scale* also had floor effects for both samples. For the high-risk control sample, 66% of the sample scored a 0.0 on the scale, while 91% of the total sample scored 0.5 or lower. For the normative sample, 68% scored 0.0 while a total of 94% of the sample scored 0.5 or lower.

One score, the *Appropriateness Score*, showed a ceiling effect with 79% of the normative sample and 77% of the high-risk control sample scoring a 4. In addition, the means for the items in the *Appropriateness Score* (C2BEX1, C2BEX5, C2BEX11, and C2BEX17) were very close to 2.0 (the highest possible mean for an appropriateness item). The *Appropriateness Score without the Happiness Item*, showed a ceiling effect with 80% of the normative sample and 77% of the high-risk control sample scoring a 3.

In addition, it needs to be noted that a number of items in the scales and scores had a zero variation. Scales and scores affected by the zero variation for some items include the *Aggression Scale* (high-risk control and normative samples), the *Positive Response Scale* (high-risk control and normative samples), the *Communication Scale* (high-risk control sample only), the *Physical Aggression Score* (high-risk control and normative samples), the *Verbal Aggression Score* (high-risk control and normative samples), the *Self-Control Score* (high-risk control and normative samples), the *Avoidant/Passive Score* (high-risk control sample only), the *Communication with Peers Score* (high-risk control sample only), the *Do Nothing Score* (high-risk control sample only), the *Appropriateness Score* (high-risk control sample only), and the *Appropriateness Score Standardized* (high-risk control sample only).

**VI. Item and Scale Means and SDs**

IEE Items Normative Sample

| Variable | Label           | N   | Mean  | Std Dev | Minimum | Maximum |
|----------|-----------------|-----|-------|---------|---------|---------|
| C2BEX1   | Happy-item 1    | 360 | 1.986 | 0.117   | 1.000   | 2.000   |
| C2BEX2   | Happy-item 2    | 362 | 1.931 | 0.354   | 0.000   | 2.000   |
| C2BEX3   | Happy-item 3    | 362 | 7.348 | 2.400   | 0.000   | 9.000   |
| C2BEX4   | Happy-item 4    | 362 | 7.000 | 2.870   | 0.000   | 9.000   |
| C2BEX5   | Sad-item 5      | 352 | 1.986 | 0.119   | 1.000   | 2.000   |
| C2BEX6   | Sad-item 6      | 362 | 1.848 | 0.517   | 0.000   | 2.000   |
| C2BEX7   | Sad-item 7      | 362 | 4.989 | 2.804   | 0.000   | 9.000   |
| C2BEX8   | Sad-item 8      | 362 | 4.787 | 3.240   | 0.000   | 9.000   |
| C2BEX9   | Sad-item 9      | 362 | 7.077 | 1.986   | 0.000   | 9.000   |
| C2BEX10  | Sad-item 10     | 362 | 6.019 | 3.025   | 0.000   | 9.000   |
| C2BEX11  | Angry-item 11   | 348 | 1.983 | 0.130   | 1.000   | 2.000   |
| C2BEX12  | Angry-item 12   | 362 | 1.743 | 0.655   | 0.000   | 2.000   |
| C2BEX13  | Angry-item 13   | 361 | 3.873 | 2.872   | 0.000   | 9.000   |
| C2BEX14  | Angry-item 14   | 361 | 3.504 | 3.240   | 0.000   | 9.000   |
| C2BEX15  | Angry-item 15   | 361 | 6.194 | 2.515   | 0.000   | 9.000   |
| C2BEX16  | Angry-item 16   | 361 | 4.909 | 3.434   | 0.000   | 9.000   |
| C2BEX17  | Worried-item 17 | 324 | 1.972 | 0.165   | 1.000   | 2.000   |
| C2BEX18  | Worried-item 18 | 361 | 1.518 | 0.837   | 0.000   | 2.000   |
| C2BEX19  | Worried-item 19 | 362 | 5.006 | 2.915   | 0.000   | 9.000   |
| C2BEX20  | Worried-item 20 | 361 | 4.022 | 3.450   | 0.000   | 9.000   |
| C2BEX21  | Worried-item 21 | 361 | 6.410 | 2.663   | 0.000   | 9.000   |
| C2BEX22  | Worried-item 22 | 362 | 5.030 | 3.578   | 0.000   | 9.000   |

IEE Subscales Normative Sample

| Variable | Label  | N   | Mean  | Std Dev | Minimum | Maximum |
|----------|--|-----|-------|---------|---------|---------|
| IEE2NRS  | No Response score IEE Y2                                     | 365 | 0.447 | 0.935   | 0.000   | 6.000   |
| IEE2PAG  | Physical Aggression score IEE Y2                             | 365 | 0.304 | 0.568   | 0.000   | 3.000   |
| IEE2VAG  | Verbal Aggression score IEE Y2                               | 365 | 0.074 | 0.262   | 0.000   | 1.000   |
| IEE2APS  | Avoidant/Passive score IEE Y2                                | 365 | 0.866 | 1.044   | 0.000   | 6.000   |
| IEE2ADS  | Affective Display score IEE Y2                               | 365 | 0.795 | 1.079   | 0.000   | 5.000   |
| IEE2CWA  | Communication w/Adults score IEE Y2                          | 365 | 0.701 | 1.001   | 0.000   | 5.000   |
| IEE2CWP  | Communication w/Peers score IEE Y2                           | 365 | 0.173 | 0.426   | 0.000   | 2.000   |
| IEE2SCS  | Self-Control score IEE Y2                                    | 365 | 0.115 | 0.360   | 0.000   | 3.000   |
| IEE2PSS  | Prosocial score IEE Y2                                       | 365 | 2.203 | 1.159   | 0.000   | 6.000   |
| IEE2DNS  | Do Nothing score IEE Y2                                      | 365 | 1.258 | 1.097   | 0.000   | 4.000   |
| IEE2AGG  | Aggression Scale IEE Y2                                      | 365 | 0.189 | 0.305   | 0.000   | 1.500   |
| IEE2PRS  | Positive Response Scale IEE Y2                               | 365 | 1.159 | 0.625   | 0.000   | 3.000   |
| IEE2COM  | Communication Scale IEE Y2                                   | 365 | 0.437 | 0.535   | 0.000   | 2.500   |
| IEE2ASC  | Appropriateness Score IEE Y2                                 | 365 | 3.723 | 0.644   | 0.000   | 4.000   |
| IEE2ASCz | Appropriateness Score Standardized Y2                        | 360 | 0.015 | 0.646   | -7.291  | 0.155   |
| IEE2AS2  | Appropriateness Score without Happiness Item IEE Y2          | 365 | 2.751 | 0.560   | 0.000   | 3.000   |
| IEE2AS2z | Appropriateness Score Standardized without Happiness Item Y2 | 358 | 0.025 | 0.641   | -6.634  | 0.166   |

IEE Items Control Sample

| Variable | Label           | N   | Mean  | Std Dev | Minimum | Maximum |
|----------|-----------------|-----|-------|---------|---------|---------|
| C2BEX1   | Happy-item 1    | 146 | 2.000 | 0.000   | 2.000   | 2.000   |
| C2BEX2   | Happy-item 2    | 147 | 1.871 | 0.486   | 0.000   | 2.000   |
| C2BEX3   | Happy-item 3    | 145 | 7.497 | 2.574   | 0.000   | 9.000   |
| C2BEX4   | Happy-item 4    | 145 | 6.683 | 3.261   | 0.000   | 9.000   |
| C2BEX5   | Sad-item 5      | 143 | 1.993 | 0.084   | 1.000   | 2.000   |
| C2BEX6   | Sad-item 6      | 147 | 1.769 | 0.642   | 0.000   | 2.000   |
| C2BEX7   | Sad-item 7      | 146 | 4.932 | 3.078   | 0.000   | 9.000   |
| C2BEX8   | Sad-item 8      | 146 | 4.281 | 3.538   | 0.000   | 9.000   |
| C2BEX9   | Sad-item 9      | 146 | 6.630 | 2.491   | 0.000   | 9.000   |
| C2BEX10  | Sad-item 10     | 146 | 5.363 | 3.486   | 0.000   | 9.000   |
| C2BEX11  | Angry-item 11   | 139 | 1.986 | 0.120   | 1.000   | 2.000   |
| C2BEX12  | Angry-item 12   | 147 | 1.701 | 0.706   | 0.000   | 2.000   |
| C2BEX13  | Angry-item 13   | 146 | 3.719 | 3.003   | 0.000   | 9.000   |
| C2BEX14  | Angry-item 14   | 146 | 3.137 | 3.224   | 0.000   | 9.000   |
| C2BEX15  | Angry-item 15   | 146 | 5.521 | 2.717   | 0.000   | 8.000   |
| C2BEX16  | Angry-item 16   | 146 | 4.534 | 3.518   | 0.000   | 8.000   |
| C2BEX17  | Worried-item 17 | 128 | 1.984 | 0.125   | 1.000   | 2.000   |
| C2BEX18  | Worried-item 18 | 146 | 1.432 | 0.886   | 0.000   | 2.000   |
| C2BEX19  | Worried-item 19 | 146 | 4.623 | 3.116   | 0.000   | 9.000   |
| C2BEX20  | Worried-item 20 | 146 | 3.466 | 3.563   | 0.000   | 9.000   |
| C2BEX21  | Worried-item 21 | 146 | 5.979 | 2.956   | 0.000   | 8.000   |
| C2BEX22  | Worried-item 22 | 146 | 4.637 | 3.646   | 0.000   | 9.000   |

IEE Subscales Control Sample

| Variable | Label  | N   | Mean  | Std Dev | Minimum | Maximum |
|----------|--|-----|-------|---------|---------|---------|
| IEE2NRS  | No Response score IEE Y2                                     | 151 | 0.662 | 1.238   | 0.000   | 6.000   |
| IEE2PAG  | Physical Aggression score IEE Y2                             | 151 | 0.364 | 0.668   | 0.000   | 4.000   |
| IEE2VAG  | Verbal Aggression score IEE Y2                               | 151 | 0.079 | 0.295   | 0.000   | 2.000   |
| IEE2APS  | Avoidant/Passive score IEE Y2                                | 151 | 0.940 | 1.179   | 0.000   | 6.000   |
| IEE2ADS  | Affective Display score IEE Y2                               | 151 | 0.649 | 1.021   | 0.000   | 5.000   |
| IEE2CWA  | Communication w/Adults score IEE Y2                          | 151 | 0.656 | 0.895   | 0.000   | 4.000   |
| IEE2CWP  | Communication w/Peers score IEE Y2                           | 151 | 0.093 | 0.313   | 0.000   | 2.000   |
| IEE2SCS  | Self-Control score IEE Y2                                    | 151 | 0.066 | 0.250   | 0.000   | 1.000   |
| IEE2PSS  | Prosocial score IEE Y2                                       | 151 | 1.940 | 1.218   | 0.000   | 5.000   |
| IEE2DNS  | Do Nothing score IEE Y2                                      | 151 | 1.311 | 1.040   | 0.000   | 4.000   |
| IEE2AGG  | Aggression Scale IEE Y2                                      | 151 | 0.222 | 0.359   | 0.000   | 2.000   |
| IEE2PRS  | Positive Response Scale IEE Y2                               | 151 | 1.003 | 0.636   | 0.000   | 2.500   |
| IEE2COM  | Communication Scale IEE Y2                                   | 151 | 0.374 | 0.484   | 0.000   | 2.000   |
| IEE2ASC  | Appropriateness Score IEE Y2                                 | 151 | 3.649 | 0.802   | 0.000   | 4.000   |
| IEE2ASCz | Appropriateness Score Standardized Y2                        | 146 | 0.080 | 0.332   | -2.295  | 0.155   |
| IEE2AS2  | Appropriateness Score without Happiness Item IEE Y2          | 151 | 2.682 | 0.687   | 0.000   | 3.000   |
| IEE2AS2z | Appropriateness Score Standardized without Happiness Item Y2 | 143 | 0.067 | 0.469   | -3.496  | 0.166   |

**VII. Subscale Correlations**

IEE Subscales Report Sample

| Pearson Correlation Coefficients<br>Prob >  r  under H0: Rho=0<br>Number of Observations |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|  | IEE2NRS                | IEE2PAG                | IEE2VAG                | IEE2APS                | IEE2ADS                | IEE2CWA                | IEE2CWP                | IEE2SCS                | IEE2PSS                | IEE2DNS                |
| <b>IEE2NRS</b><br>No Response score IEE<br>Y2  | 1.000<br>0.037<br>438  | -0.099<br>0.037<br>438 | -0.063<br>0.187<br>438 | -0.043<br>0.374<br>438 | -0.088<br>0.066<br>438 | -0.111<br>0.020<br>438 | -0.042<br>0.386<br>438 | -0.105<br>0.028<br>438 | -0.334<br>0.000<br>438 | -0.162<br>0.001<br>438 |
| <b>IEE2PAG</b><br>Physical Aggression<br>score IEE Y2                                    | -0.099<br>0.037<br>438 | 1.000<br>0.123<br>438  | -0.074<br>0.123<br>438 | -0.206<br>0.000<br>438 | -0.011<br>0.816<br>438 | -0.073<br>0.127<br>438 | -0.013<br>0.779<br>438 | -0.026<br>0.594<br>438 | 0.057<br>0.231<br>438  | -0.147<br>0.002<br>438 |
| <b>IEE2VAG</b><br>Verbal Aggression score<br>IEE Y2                                      | -0.063<br>0.187<br>438 | -0.074<br>0.123<br>438 | 1.000<br>0.652<br>438  | -0.022<br>0.652<br>438 | -0.024<br>0.620<br>438 | -0.078<br>0.102<br>438 | 0.037<br>0.437<br>438  | -0.036<br>0.453<br>438 | 0.000<br>0.997<br>438  | -0.005<br>0.915<br>438 |
| <b>IEE2APS</b><br>Avoidant/Passive score<br>IEE Y2                                       | -0.043<br>0.374<br>438 | -0.206<br>0.000<br>438 | -0.022<br>0.652<br>438 | 1.000<br>0.000<br>438  | -0.248<br>0.000<br>438 | -0.133<br>0.005<br>438 | -0.043<br>0.369<br>438 | -0.077<br>0.110<br>438 | -0.146<br>0.002<br>438 | -0.143<br>0.003<br>438 |
| <b>IEE2ADS</b><br>Affective Display score<br>IEE Y2                                      | -0.088<br>0.066<br>438 | -0.011<br>0.816<br>438 | -0.024<br>0.620<br>438 | -0.248<br>0.000<br>438 | 1.000<br>0.283<br>438  | 0.051<br>0.283<br>438  | -0.102<br>0.032<br>438 | -0.106<br>0.026<br>438 | -0.121<br>0.011<br>438 | -0.403<br>0.000<br>438 |
| <b>IEE2CWA</b><br>Communication<br>w/Adults score IEE Y2                                 | -0.111<br>0.020<br>438 | -0.073<br>0.127<br>438 | -0.078<br>0.102<br>438 | -0.133<br>0.005<br>438 | 0.051<br>0.283<br>438  | 1.000<br>0.664<br>438  | -0.021<br>0.664<br>438 | -0.097<br>0.042<br>438 | -0.416<br>0.000<br>438 | -0.108<br>0.023<br>438 |
| <b>IEE2CWP</b><br>Communication w/Peers<br>score IEE Y2                                  | -0.042<br>0.386<br>438 | -0.013<br>0.779<br>438 | 0.037<br>0.437<br>438  | -0.043<br>0.369<br>438 | -0.102<br>0.032<br>438 | -0.021<br>0.664<br>438 | 1.000<br>0.344<br>438  | 0.045<br>0.344<br>438  | -0.060<br>0.212<br>438 | -0.089<br>0.063<br>438 |
| <b>IEE2SCS</b><br>Self-Control score IEE<br>Y2   | -0.105<br>0.028<br>438 | -0.026<br>0.594<br>438 | -0.036<br>0.453<br>438 | -0.077<br>0.110<br>438 | -0.106<br>0.026<br>438 | -0.097<br>0.042<br>438 | 0.045<br>0.344<br>438  | 1.000<br>0.438<br>438  | 0.120<br>0.012<br>438  | -0.044<br>0.363<br>438 |
| <b>IEE2PSS</b><br>Prosocial score IEE Y2   | -0.334<br>0.000<br>438 | 0.057<br>0.231<br>438  | 0.000<br>0.997<br>438  | -0.146<br>0.002<br>438 | -0.121<br>0.011<br>438 | -0.416<br>0.000<br>438 | -0.060<br>0.212<br>438 | 0.120<br>0.012<br>438  | 1.000<br>0.012<br>438  | 0.044<br>0.353<br>438  |
| <b>IEE2DNS</b><br>Do Nothing score IEE<br>Y2   | -0.162<br>0.001<br>438 | -0.147<br>0.002<br>438 | -0.005<br>0.915<br>438 | -0.143<br>0.003<br>438 | -0.403<br>0.000<br>438 | -0.108<br>0.023<br>438 | -0.089<br>0.063<br>438 | -0.044<br>0.363<br>438 | 0.044<br>0.353<br>438  | 1.000<br>0.000<br>438  |
| <b>IEE2AGG</b><br>Aggression Scale IEE<br>Y2   | -0.120<br>0.012<br>438 | 0.904<br>0.000<br>438  | 0.359<br>0.000<br>438  | -0.202<br>0.000<br>438 | -0.021<br>0.668<br>438 | -0.102<br>0.033<br>438 | 0.003<br>0.945<br>438  | -0.039<br>0.412<br>438 | 0.054<br>0.261<br>438  | -0.140<br>0.003<br>438 |
| <b>IEE2PRS</b><br>Positive Response<br>Scale IEE Y2                                      | -0.339<br>0.000<br>438 | 0.046<br>0.333<br>438  | -0.010<br>0.841<br>438 | -0.157<br>0.001<br>438 | -0.142<br>0.003<br>438 | -0.413<br>0.000<br>438 | -0.043<br>0.367<br>438 | 0.384<br>0.000<br>438  | 0.963<br>0.000<br>438  | 0.029<br>0.538<br>438  |
| <b>IEE2COM</b><br>Communication Scale<br>IEE Y2  | -0.119<br>0.013<br>438 | -0.073<br>0.126<br>438 | -0.059<br>0.219<br>438 | -0.141<br>0.003<br>438 | 0.009<br>0.851<br>438  | 0.925<br>0.000<br>438  | 0.361<br>0.000<br>438  | -0.073<br>0.126<br>438 | -0.410<br>0.000<br>438 | -0.135<br>0.005<br>438 |
| <b>IEE2ASC</b><br>Appropriateness Score<br>IEE Y2  | -0.327<br>0.000<br>438 | 0.053<br>0.269<br>438  | 0.057<br>0.231<br>438  | 0.081<br>0.091<br>438  | 0.063<br>0.190<br>438  | 0.096<br>0.045<br>438  | 0.045<br>0.346<br>438  | 0.073<br>0.128<br>438  | 0.287<br>0.000<br>438  | 0.200<br>0.000<br>438  |
| <b>IEE2ASCz</b><br>Appropriateness Score<br>Standardized Y2                              | -0.097<br>0.044<br>428 | -0.050<br>0.299<br>428 | 0.053<br>0.270<br>428  | 0.037<br>0.440<br>428  | 0.028<br>0.568<br>428  | 0.002<br>0.970<br>428  | -0.051<br>0.293<br>428 | 0.019<br>0.688<br>428  | -0.003<br>0.959<br>428 | 0.046<br>0.345<br>428  |



| Pearson Correlation Coefficients  |                        |                       |                       |                       |                       |                       |                        |                       |                       |                       |
|---|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|
| Prob >  r  under H0: Rho=0  |                        |                       |                       |                       |                       |                       |                        |                       |                       |                       |
| Number of Observations  |                        |                       |                       |                       |                       |                       |                        |                       |                       |                       |
|   | IEE2NRS                | IEE2PAG               | IEE2VAG               | IEE2APS               | IEE2ADS               | IEE2CWA               | IEE2CWP                | IEE2SCS               | IEE2PSS               | IEE2DNS               |
| <b>IEE2AS2</b><br>Appropriateness Score<br>without Happiness Item<br>IEE Y2           | -0.393<br>0.000<br>438 | 0.066<br>0.167<br>438 | 0.053<br>0.269<br>438 | 0.069<br>0.147<br>438 | 0.050<br>0.293<br>438 | 0.105<br>0.028<br>438 | 0.042<br>0.382<br>438  | 0.080<br>0.094<br>438 | 0.294<br>0.000<br>438 | 0.188<br>0.000<br>438 |
| <b>IEE2AS2z</b><br>Appropriateness Score<br>Standardized without<br>Happiness Item Y2 | -0.154<br>0.001<br>424 | 0.002<br>0.959<br>424 | 0.055<br>0.255<br>424 | 0.043<br>0.376<br>424 | 0.017<br>0.726<br>424 | 0.021<br>0.670<br>424 | -0.060<br>0.218<br>424 | 0.008<br>0.862<br>424 | 0.031<br>0.520<br>424 | 0.023<br>0.643<br>424 |

| Pearson Correlation Coefficients                         |                        |                        |                        |                        |                        |                        |                        |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Prob >  r  under H0: Rho=0                               |                        |                        |                        |                        |                        |                        |                        |
| Number of Observations                                   |                        |                        |                        |                        |                        |                        |                        |
|  | IEE2AGG                | IEE2PRS                | IEE2COM                | IEE2ASC                | IEE2ASCz               | IEE2AS2                | IEE2AS2z               |
| <b>IEE2NRS</b><br>No Response score IEE<br>Y2            | -0.120<br>0.012<br>438 | -0.339<br>0.000<br>438 | -0.119<br>0.013<br>438 | -0.327<br>0.000<br>438 | -0.097<br>0.044<br>428 | -0.393<br>0.000<br>438 | -0.154<br>0.001<br>424 |
| <b>IEE2PAG</b><br>Physical Aggression<br>score IEE Y2    | 0.904<br>0.000<br>438  | 0.046<br>0.333<br>438  | -0.073<br>0.126<br>438 | 0.053<br>0.269<br>438  | -0.050<br>0.299<br>428 | 0.066<br>0.167<br>438  | 0.002<br>0.959<br>424  |
| <b>IEE2VAG</b><br>Verbal Aggression score<br>IEE Y2      | 0.359<br>0.000<br>438  | -0.010<br>0.841<br>438 | -0.059<br>0.219<br>438 | 0.057<br>0.231<br>438  | 0.053<br>0.270<br>428  | 0.053<br>0.269<br>438  | 0.055<br>0.255<br>424  |
| <b>IEE2APS</b><br>Avoidant/Passive score<br>IEE Y2       | -0.202<br>0.000<br>438 | -0.157<br>0.001<br>438 | -0.141<br>0.003<br>438 | 0.081<br>0.091<br>438  | 0.037<br>0.440<br>428  | 0.069<br>0.147<br>438  | 0.043<br>0.376<br>424  |
| <b>IEE2ADS</b><br>Affective Display score<br>IEE Y2      | -0.021<br>0.668<br>438 | -0.142<br>0.003<br>438 | 0.009<br>0.851<br>438  | 0.063<br>0.190<br>438  | 0.028<br>0.568<br>428  | 0.050<br>0.293<br>438  | 0.017<br>0.726<br>424  |
| <b>IEE2CWA</b><br>Communication<br>w/Adults score IEE Y2 | -0.102<br>0.033<br>438 | -0.413<br>0.000<br>438 | 0.925<br>0.000<br>438  | 0.096<br>0.045<br>438  | 0.002<br>0.970<br>428  | 0.105<br>0.028<br>438  | 0.021<br>0.670<br>424  |
| <b>IEE2CWP</b><br>Communication w/Peers<br>score IEE Y2  | 0.003<br>0.945<br>438  | -0.043<br>0.367<br>438 | 0.361<br>0.000<br>438  | 0.045<br>0.346<br>438  | -0.051<br>0.293<br>428 | 0.042<br>0.382<br>438  | -0.060<br>0.218<br>424 |
| <b>IEE2SCS</b><br>Self-Control score IEE<br>Y2           | -0.039<br>0.412<br>438 | 0.384<br>0.000<br>438  | -0.073<br>0.126<br>438 | 0.073<br>0.128<br>438  | 0.019<br>0.688<br>428  | 0.080<br>0.094<br>438  | 0.008<br>0.862<br>424  |
| <b>IEE2PSS</b><br>Prosocial score IEE Y2                 | 0.054<br>0.261<br>438  | 0.963<br>0.000<br>438  | -0.410<br>0.000<br>438 | 0.287<br>0.000<br>438  | -0.003<br>0.959<br>428 | 0.294<br>0.000<br>438  | 0.031<br>0.520<br>424  |
| <b>IEE2DNS</b><br>Do Nothing score IEE<br>Y2             | -0.140<br>0.003<br>438 | 0.029<br>0.538<br>438  | -0.135<br>0.005<br>438 | 0.200<br>0.000<br>438  | 0.046<br>0.345<br>428  | 0.188<br>0.000<br>438  | 0.023<br>0.643<br>424  |
| <b>IEE2AGG</b><br>Aggression Scale IEE<br>Y2             | 1.000<br>438           | 0.039<br>0.412<br>438  | -0.094<br>0.050<br>438 | 0.074<br>0.121<br>438  | -0.024<br>0.618<br>428 | 0.085<br>0.077<br>438  | 0.026<br>0.591<br>424  |
| <b>IEE2PRS</b><br>Positive Response<br>Scale IEE Y2      | 0.039<br>0.412<br>438  | 1.000<br>438           | -0.402<br>0.000<br>438 | 0.286<br>0.000<br>438  | 0.003<br>0.948<br>428  | 0.296<br>0.000<br>438  | 0.031<br>0.519<br>424  |
| <b>IEE2COM</b><br>Communication Scale<br>IEE Y2          | -0.094<br>0.050<br>438 | -0.402<br>0.000<br>438 | 1.000<br>438           | 0.107<br>0.026<br>438  | -0.018<br>0.712<br>428 | 0.114<br>0.017<br>438  | -0.004<br>0.940<br>424 |

| Pearson Correlation Coefficients<br>Prob >  r  under H0: Rho=0<br>Number of Observations |                        |                       |                        |                       |                       |                       |                       |
|--|------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | IEE2AGG                | IEE2PRS               | IEE2COM                | IEE2ASC               | IEE2ASCz              | IEE2AS2               | IEE2AS2z              |
| <b>IEE2ASC</b><br>Appropriateness Score<br>IEE Y2  | 0.074<br>0.121<br>438  | 0.286<br>0.000<br>438 | 0.107<br>0.026<br>438  | 1.000<br><br>438      | 0.624<br>0.000<br>428 | 0.978<br>0.000<br>438 | 0.646<br>0.000<br>424 |
| <b>IEE2ASCz</b><br>Appropriateness Score<br>Standardized Y2                              | -0.024<br>0.618<br>428 | 0.003<br>0.948<br>428 | -0.018<br>0.712<br>428 | 0.624<br>0.000<br>428 | 1.000<br><br>428      | 0.510<br>0.000<br>428 | 0.924<br>0.000<br>424 |
| <b>IEE2AS2</b><br>Appropriateness Score<br>without Happiness Item<br>IEE Y2              | 0.085<br>0.077<br>438  | 0.296<br>0.000<br>438 | 0.114<br>0.017<br>438  | 0.978<br>0.000<br>438 | 0.510<br>0.000<br>428 | 1.000<br><br>438      | 0.609<br>0.000<br>424 |
| <b>IEE2AS2z</b><br>Appropriateness Score<br>Standardized without<br>Happiness Item Y2    | 0.026<br>0.591<br>424  | 0.031<br>0.519<br>424 | -0.004<br>0.940<br>424 | 0.646<br>0.000<br>424 | 0.924<br>0.000<br>424 | 0.609<br>0.000<br>424 | 1.000<br><br>424      |