

*RAILS
Institution #7 Data Analysis*
Bei Yu & Megan Oakleaf

Table: librarian: 1; faculty: 2

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| institute | A | B | C | D | E | F | G | H | J | K | L |
| 7 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |

1. **Kripendorff’s Alpha measure:**

|  |  |  |  |
| --- | --- | --- | --- |
| criterion | All judges | All librarians | All faculty |
| 15800 | .9552 | .9976 | .9307 |
| 15801 | .6485 | .7402 | .6317 |
| 15802 | .9485 | 1.0000 | .9190 |
| 15803 | .3429 | .3955 | .3059 |
| Total score | .7643 | .8191 | .7447 |

1. **Cohen’s Kappa**

**pairwise Kappa agreement on criterion code 15800:**

Mean Kappa for all judges=.960

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | .984 | .842 | .984 | .984 | .984 | .984 | .953 | .969 | .984 | .969 |
| 7B |  | .858 | 1.000 | 1.000 | 1.000 | 1.000 | .969 | .984 | 1.000 | .984 |
| 7C |  |  | .858 | .858 | .858 | .858 | .827 | .843 | .858 | .858 |
| 7D |  |  |  | 1.000 | 1.000 | 1.000 | .969 | .984 | 1.000 | .984 |
| 7E |  |  |  |  | 1.000 | 1.000 | .969 | .984 | 1.000 | .984 |
| 7F |  |  |  |  |  | 1.000 | .969 | .984 | 1.000 | .984 |
| 7G |  |  |  |  |  |  | .969 | .984 | 1.000 | .984 |
| 7H |  |  |  |  |  |  |  | .953 | .969 | .953 |
| 7J |  |  |  |  |  |  |  |  | .984 | .969 |
| 7K |  |  |  |  |  |  |  |  |  | .984 |

Mean Kappa for librarian=.992

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | .984 | .984 | .984 |
| 7B |  | 1.000 | 1.000 |
| 7D |  |  | 1.000 |

Mean Kappa for faculty=.942

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .858 | .858 | .827 | .843 | .858 | .858 |
| 7F |  | 1.000 | .969 | .984 | 1.000 | .984 |
| 7G |  |  | .969 | .984 | 1.000 | .984 |
| 7H |  |  |  | .953 | .969 | .953 |
| 7J |  |  |  |  | .984 | .969 |
| 7K |  |  |  |  |  | .984 |

**pairwise Kappa agreement on criterion code 15801:**

Mean Kappa for all judges=.613

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | .852 | .431 | .644 | .601 | .860 | .725 | .547 | .497 | .622 | .843 |
| 7B |  | .357 | .711 | .618 | .898 | .751 | .563 | .449 | .547 | .830 |
| 7C |  |  | .323 | .350 | .394 | .441 | .461 | .344 | .473 | .478 |
| 7D |  |  |  | .674 | .680 | .687 | .600 | .485 | .611 | .714 |
| 7E |  |  |  |  | .636 | .687 | .556 | .703 | .631 | .583 |
| 7F |  |  |  |  |  | .788 | .581 | .487 | .612 | .838 |
| 7G |  |  |  |  |  |  | .694 | .675 | .729 | .750 |
| 7H |  |  |  |  |  |  |  | .590 | .785 | .615 |
| 7J |  |  |  |  |  |  |  |  | .601 | .460 |
| 7K |  |  |  |  |  |  |  |  |  | .647 |

Mean Kappa for librarian=.683

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | .852 | .644 | .601 |
| 7B |  | .711 | .618 |
| 7D |  |  | .674 |

Mean Kappa for faculty=.593

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .394 | .441 | .461 | .344 | .473 | .478 |
| 7F |  | .788 | .581 | .487 | .612 | .838 |
| 7G |  |  | .694 | .675 | .729 | .750 |
| 7H |  |  |  | .590 | .785 | .615 |
| 7J |  |  |  |  | .601 | .460 |
| 7K |  |  |  |  |  | .647 |

**pairwise Kappa agreement on criterion code 15802:**

Mean Kappa for all judges=.934

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | 1.000 | .832 | 1.000 | 1.000 | 1.000 | .982 | .965 | .964 | 1.000 | .893 |
| 7B |  | .832 | 1.000 | 1.000 | 1.000 | .982 | .965 | .964 | 1.000 | .893 |
| 7C |  |  | .832 | .832 | .832 | .813 | .798 | .796 | .832 | .723 |
| 7D |  |  |  | 1.000 | 1.000 | .982 | .965 | .964 | 1.000 | .893 |
| 7E |  |  |  |  | 1.000 | .982 | .965 | .964 | 1.000 | .893 |
| 7F |  |  |  |  |  | .982 | .965 | .964 | 1.000 | .893 |
| 7G |  |  |  |  |  |  | .947 | .946 | .982 | .876 |
| 7H |  |  |  |  |  |  |  | .930 | .965 | .860 |
| 7J |  |  |  |  |  |  |  |  | .964 | .859 |
| 7K |  |  |  |  |  |  |  |  |  | .893 |

Mean Kappa for librarian=1.000

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | 1.000 | 1.000 | 1.000 |
| 7B |  | 1.000 | 1.000 |
| 7D |  |  | 1.000 |

Mean Kappa for faculty=.896

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .832 | .813 | .798 | .796 | .832 | .723 |
| 7F |  | .982 | .965 | .964 | 1.000 | .893 |
| 7G |  |  | .947 | .946 | .982 | .876 |
| 7H |  |  |  | .930 | .965 | .860 |
| 7J |  |  |  |  | .964 | .859 |
| 7K |  |  |  |  |  | .893 |

**pairwise Kappa agreement on criterion code 15803:**

Mean Kappa for all judges=.270

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | .478 | .274 | .290 | .352 | .464 | .141 | .269 | .330 | .221 | .213 |
| 7B |  | .319 | .306 | .298 | .447 | .154 | .353 | .427 | .324 | .137 |
| 7C |  |  | .212 | .450 | .296 | .241 | .091 | .282 | .288 | .186 |
| 7D |  |  |  | .332 | .399 | .023 | .223 | .253 | .297 | .184 |
| 7E |  |  |  |  | .298 | .252 | .268 | .347 | .288 | .241 |
| 7F |  |  |  |  |  | .122 | .248 | .504 | .349 | .255 |
| 7G |  |  |  |  |  |  | .095 | .214 | .078 | .257 |
| 7H |  |  |  |  |  |  |  | .453 | .176 | .152 |
| 7J |  |  |  |  |  |  |  |  | .287 | .155 |
| 7K |  |  |  |  |  |  |  |  |  | .243 |

Mean Kappa for librarian=.343

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | .478 | .290 | .352 |
| 7B |  | .306 | .298 |
| 7D |  |  | .332 |

Mean Kappa for faculty=.237

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .296 | .241 | .091 | .282 | .288 | .186 |
| 7F |  | .122 | .248 | .504 | .349 | .255 |
| 7G |  |  | .095 | .214 | .078 | .257 |
| 7H |  |  |  | .453 | .176 | .152 |
| 7J |  |  |  |  | .287 | .155 |
| 7K |  |  |  |  |  | .243 |

**Summary of Cohen’s Kappa**

|  |  |  |  |
| --- | --- | --- | --- |
| Criterion | Librarian (1) | Faculty (2) | All judges |
| 15800 | .992 | .942 | .960 |
| 15801 | .683 | .593 | .613 |
| 15802 | 1.000 | .896 | .934 |
| 15803 | .343 | .237 | .270 |
| Total score | n/a | n/a | n/a |

1. **Pearson’s correlation**

**Pairwise correlation regarding criterion code “15800”**

Mean Correlation all judges=.954

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | .993\*\* | .820\*\* | .993\*\* | .993\*\* | .993\*\* | .993\*\* | .957\*\* | .964\*\* | .993\*\* | .986\*\* |
| 7B |  | .824\*\* | 1.000\*\* | 1.000\*\* | 1.000\*\* | 1.000\*\* | .964\*\* | .971\*\* | 1.000\*\* | .993\*\* |
| 7C |  |  | .824\*\* | .824\*\* | .824\*\* | .824\*\* | .791\*\* | .798\*\* | .824\*\* | .805\*\* |
| 7D |  |  |  | 1.000\*\* | 1.000\*\* | 1.000\*\* | .964\*\* | .971\*\* | 1.000\*\* | .993\*\* |
| 7E |  |  |  |  | 1.000\*\* | 1.000\*\* | .964\*\* | .971\*\* | 1.000\*\* | .993\*\* |
| 7F |  |  |  |  |  | 1.000\*\* | .964\*\* | .971\*\* | 1.000\*\* | .993\*\* |
| 7G |  |  |  |  |  |  | .964\*\* | .971\*\* | 1.000\*\* | .993\*\* |
| 7H |  |  |  |  |  |  |  | .935\*\* | .964\*\* | .957\*\* |
| 7J |  |  |  |  |  |  |  |  | .971\*\* | .964\*\* |
| 7K |  |  |  |  |  |  |  |  |  | .993\*\* |

\*\*. Correlation is significant at the 0.01level

Mean Correlation for librarian=.997

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | .993\*\* | .993\*\* | .993\*\* |
| 7B |  | 1.000\*\* | 1.000\*\* |
| 7D |  |  | 1.000\*\* |

\*\*. Correlation is significant at the 0.01level

Mean correlation for faculty=.929

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .824\*\* | .824\*\* | .791\*\* | .798\*\* | .824\*\* | .805\*\* |
| 7F |  | 1.000\*\* | .964\*\* | .971\*\* | 1.000\*\* | .993\*\* |
| 7G |  |  | .964\*\* | .971\*\* | 1.000\*\* | .993\*\* |
| 7H |  |  |  | .935\*\* | .964\*\* | .957\*\* |
| 7J |  |  |  |  | .971\*\* | .964\*\* |
| 7K |  |  |  |  |  | .993\*\* |

\*\*. Correlation is significant at the 0.01level

**Pairwise correlation regarding criterion code “15801”**

Mean Correlation all judges=.698

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | .861\*\* | .483\*\* | .778\*\* | .710\*\* | .884\*\* | .762\*\* | .602\*\* | .616\*\* | .654\*\* | .836\*\* |
| 7B |  | .432\*\* | .847\*\* | .713\*\* | .895\*\* | .773\*\* | .611\*\* | .584\*\* | .548\*\* | .835\*\* |
| 7C |  |  | .515\*\* | .501\*\* | .483\*\* | .590\*\* | .645\*\* | .500\*\* | .623\*\* | .540\*\* |
| 7D |  |  |  | .789\*\* | .810\*\* | .828\*\* | .730\*\* | .657\*\* | .698\*\* | .876\*\* |
| 7E |  |  |  |  | .740\*\* | .812\*\* | .616\*\* | .782\*\* | .668\*\* | .679\*\* |
| 7F |  |  |  |  |  | .824\*\* | .630\*\* | .631\*\* | .627\*\* | .855\*\* |
| 7G |  |  |  |  |  |  | .772\*\* | .801\*\* | .768\*\* | .790\*\* |
| 7H |  |  |  |  |  |  |  | .729\*\* | .805\*\* | .679\*\* |
| 7J |  |  |  |  |  |  |  |  | .701\*\* | .594\*\* |
| 7K |  |  |  |  |  |  |  |  |  | .676\*\* |

\*\*. Correlation is significant at the 0.01level

Mean Correlation for librarian=.783

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | .861\*\* | .778\*\* | .710\*\* |
| 7B |  | .847\*\* | .713\*\* |
| 7D |  |  | .789\*\* |

\*\*. Correlation is significant at the 0.01level

Mean correlation for faculty=.679

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .483\*\* | .590\*\* | .645\*\* | .500\*\* | .623\*\* | .540\*\* |
| 7F |  | .824\*\* | .630\*\* | .631\*\* | .627\*\* | .855\*\* |
| 7G |  |  | .772\*\* | .801\*\* | .768\*\* | .790\*\* |
| 7H |  |  |  | .729\*\* | .805\*\* | .679\*\* |
| 7J |  |  |  |  | .701\*\* | .594\*\* |
| 7K |  |  |  |  |  | .676\*\* |

\*\*. Correlation is significant at the 0.01level

**Pairwise correlation regarding criterion code “15802”**

Mean Correlation all judges=.924

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | 1.000\*\* | .885\*\* | 1.000\*\* | 1.000\*\* | 1.000\*\* | .987\*\* | .807\*\* | .975\*\* | 1.000\*\* | .926\*\* |
| 7B |  | .885\*\* | 1.000\*\* | 1.000\*\* | 1.000\*\* | .987\*\* | .807\*\* | .975\*\* | 1.000\*\* | .926\*\* |
| 7C |  |  | .885\*\* | .885\*\* | .885\*\* | .871\*\* | .702\*\* | .863\*\* | .885\*\* | .811\*\* |
| 7D |  |  |  | 1.000\*\* | 1.000\*\* | .987\*\* | .807\*\* | .975\*\* | 1.000\*\* | .926\*\* |
| 7E |  |  |  |  | 1.000\*\* | .987\*\* | .807\*\* | .975\*\* | 1.000\*\* | .926\*\* |
| 7F |  |  |  |  |  | .987\*\* | .807\*\* | .975\*\* | 1.000\*\* | .926\*\* |
| 7G |  |  |  |  |  |  | .794\*\* | .963\*\* | .987\*\* | .913\*\* |
| 7H |  |  |  |  |  |  |  | .787\*\* | .807\*\* | .738\*\* |
| 7J |  |  |  |  |  |  |  |  | .975\*\* | .903\*\* |
| 7K |  |  |  |  |  |  |  |  |  | .926\*\* |

\*\*. Correlation is significant at the 0.01level

Mean Correlation for librarian=1.000

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | 1.000\*\* | 1.000\*\* | 1.000\*\* |
| 7B |  | 1.000\*\* | 1.000\*\* |
| 7D |  |  | 1.000\*\* |

\*\*. Correlation is significant at the 0.01level

Mean correlation for faculty=.881

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .885\*\* | .871\*\* | .702\*\* | .863\*\* | .885\*\* | .811\*\* |
| 7F |  | .987\*\* | .807\*\* | .975\*\* | 1.000\*\* | .926\*\* |
| 7G |  |  | .794\*\* | .963\*\* | .987\*\* | .913\*\* |
| 7H |  |  |  | .787\*\* | .807\*\* | .738\*\* |
| 7J |  |  |  |  | .975\*\* | .903\*\* |
| 7K |  |  |  |  |  | .926\*\* |

\*\*. Correlation is significant at the 0.01level

**Pairwise correlation regarding criterion code “15803”**

Mean Correlation all judges=.377

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | .516\*\* | .353\*\* | .357\*\* | .388\*\* | .582\*\* | .150 | .461\*\* | .426\*\* | .342\*\* | .401\*\* |
| 7B |  | .256\* | .457\*\* | .253\* | .627\*\* | .277\*\* | .439\*\* | .550\*\* | .371\*\* | .380\*\* |
| 7C |  |  | .352\*\* | .391\*\* | .401\*\* | .306\*\* | .178 | .335\*\* | .290\*\* | .389\*\* |
| 7D |  |  |  | .500\*\* | .518\*\* | .136 | .456\*\* | .342\*\* | .371\*\* | .333\*\* |
| 7E |  |  |  |  | .371\*\* | .360\*\* | .476\*\* | .335\*\* | .309\*\* | .455\*\* |
| 7F |  |  |  |  |  | .227\* | .449\*\* | .604\*\* | .393\*\* | .410\*\* |
| 7G |  |  |  |  |  |  | .146 | .252\* | .224\* | .372\*\* |
| 7H |  |  |  |  |  |  |  | .541\*\* | .344\*\* | .343\*\* |
| 7J |  |  |  |  |  |  |  |  | .413\*\* | .312\*\* |
| 7K |  |  |  |  |  |  |  |  |  | .502\*\* |

\*\*. Correlation is significant at the 0.01level

\*. Correlation is significant at the 0.05 level

Mean Correlation for librarian=.412

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | .516\*\* | .357\*\* | .388\*\* |
| 7B |  | .457\*\* | .253\* |
| 7D |  |  | .500\*\* |

\*\*. Correlation is significant at the 0.01level

\*. Correlation is significant at the 0.05 level

Mean correlation for faculty=.354

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .401\*\* | .306\*\* | .178 | .335\*\* | .290\*\* | .389\*\* |
| 7F |  | .227\* | .449\*\* | .604\*\* | .393\*\* | .410\*\* |
| 7G |  |  | .146 | .252\* | .224\* | .372\*\* |
| 7H |  |  |  | .541\*\* | .344\*\* | .343\*\* |
| 7J |  |  |  |  | .413\*\* | .312\*\* |
| 7K |  |  |  |  |  | .502\*\* |

\*\*. Correlation is significant at the 0.01level

\*. Correlation is significant at the 0.05 level

**Pairwise correlation regarding total scores**

Mean Correlation all judges=.793

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7J | 7K | 7L |
| 7A | .896\*\* | .710\*\* | .815\*\* | .811\*\* | .906\*\* | .815\*\* | .784\*\* | .821\*\* | .764\*\* | .827\*\* |
| 7B |  | .684\*\* | .854\*\* | .817\*\* | .921\*\* | .852\*\* | .824\*\* | .842\*\* | .762\*\* | .863\*\* |
| 7C |  |  | .714\*\* | .666\*\* | .703\*\* | .660\*\* | .686\*\* | .700\*\* | .729\*\* | .697\*\* |
| 7D |  |  |  | .825\*\* | .852\*\* | .771\*\* | .743\*\* | .765\*\* | .745\*\* | .818\*\* |
| 7E |  |  |  |  | .824\*\* | .848\*\* | .702\*\* | .797\*\* | .738\*\* | .833\*\* |
| 7F |  |  |  |  |  | .850\*\* | .810\*\* | .858\*\* | .794\*\* | .872\*\* |
| 7G |  |  |  |  |  |  | .753\*\* | .842\*\* | .794\*\* | .846\*\* |
| 7H |  |  |  |  |  |  |  | .851\*\* | .799\*\* | .758\*\* |
| 7J |  |  |  |  |  |  |  |  | .815\*\* | .811\*\* |
| 7K |  |  |  |  |  |  |  |  |  | .764\*\* |

\*\*. Correlation is significant at the 0.01level

Mean Correlation for librarian=.836

|  |  |  |  |
| --- | --- | --- | --- |
|  | 7B | 7D | 7E |
| 7A | .896\*\* | .815\*\* | .811\*\* |
| 7B |  | .854\*\* | .817\*\* |
| 7D |  |  | .825\*\* |

\*\*. Correlation is significant at the 0.01level

Mean correlation for faculty=.781

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7F | 7G | 7H | 7J | 7K | 7L |
| 7C | .703\*\* | .660\*\* | .686\*\* | .700\*\* | .729\*\* | .697\*\* |
| 7F |  | .850\*\* | .810\*\* | .858\*\* | .794\*\* | .872\*\* |
| 7G |  |  | .753\*\* | .842\*\* | .794\*\* | .846\*\* |
| 7H |  |  |  | .851\*\* | .799\*\* | .758\*\* |
| 7J |  |  |  |  | .815\*\* | .811\*\* |
| 7K |  |  |  |  |  | .764\*\* |

\*\*. Correlation is significant at the 0.01level

**Summary of Mean Pearson’s Correlation**

|  |  |  |  |
| --- | --- | --- | --- |
| criterion | Librarian (1) | Faculty (2) | All judges |
| 15800 | .997 | .929 | .954 |
| 15801 | .783 | .679 | .698 |
| 15802 | 1.000 | .881 | .924 |
| 15803 | .412 | .354 | .377 |
| Total score | .836 | .781 | .793 |