

*RAILS
Institution #6 Data Analysis*
Bei Yu & Megan Oakleaf

Table: librarian: 1; faculty: 2

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| institute | A | B | C | D | E | F | G | H | J | K | L |
| 6 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 |

1. **Kripendorff’s Alpha measure:**

|  |  |  |  |
| --- | --- | --- | --- |
| criterion | All judges | All librarians | All faculty |
| 21150 | .7114 | .5812 | .7452 |
| 21151 | .5836 | .6362 | .5588 |
| 21152 | .6498 | .6374 | .6527 |
| Total score | .7568 | .7326 | .7602 |

1. **Cohen’s Kappa**

**pairwise Kappa agreement on criterion code 21150:**

Mean Kappa for all judges=.417

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6B | 6C | 6D | 6E | 6F | 6G | 6H | 6J | 6K | 6L |
| 6A | .334 | .216 | .464 | .422 | .444 | .361 | .268 | .394 | .188 | .180 |
| 6B |  | .323 | .563 | .414 | .452 | .465 | .395 | .309 | .372 | .389 |
| 6C |  |  | .500 | .584 | .439 | .502 | .368 | .428 | .435 | .499 |
| 6D |  |  |  | .545 | .598 | .628 | .382 | .503 | .388 | .430 |
| 6E |  |  |  |  | .468 | .623 | .452 | .435 | .420 | .474 |
| 6F |  |  |  |  |  | .562 | .383 | .519 | .317 | .385 |
| 6G |  |  |  |  |  |  | .415 | .519 | .366 | .470 |
| 6H |  |  |  |  |  |  |  | .304 | .289 | .329 |
| 6J |  |  |  |  |  |  |  |  | .264 | .379 |
| 6K |  |  |  |  |  |  |  |  |  | .358 |

Mean Kappa for librarian=.282

|  |  |  |
| --- | --- | --- |
|  | 6J | 6K |
| 6A | .394 | .188 |
| 6J |  | .264 |

Mean Kappa for faculty=.466

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6C | 6D | 6E | 6F | 6G | 6H | 6L |
| 6B | .323 | .563 | .414 | .452 | .465 | .395 | .389 |
| 6C |  | .500 | .584 | .439 | .502 | .368 | .499 |
| 6D |  |  | .545 | .598 | .628 | .382 | .430 |
| 6E |  |  |  | .468 | .623 | .452 | .474 |
| 6F |  |  |  |  | .562 | .383 | .385 |
| 6G |  |  |  |  |  | .415 | .470 |
| 6H |  |  |  |  |  |  | .329 |

**pairwise Kappa agreement on criterion code 21151:**

Mean Kappa for all judges=.391

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6B | 6C | 6D | 6E | 6F | 6G | 6H | 6J | 6K | 6L |
| 6A | .288 | .592 | .500 | .332 | .396 | .433 | .495 | .473 | .449 | .533 |
| 6B |  | .269 | .334 | .170 | .310 | .358 | .169 | .285 | .245 | .295 |
| 6C |  |  | .338 | .374 | .297 | .493 | .453 | .414 | .323 | .397 |
| 6D |  |  |  | .305 | .512 | .305 | .458 | .537 | .555 | .414 |
| 6E |  |  |  |  | .311 | .346 | .424 | .453 | .355 | .363 |
| 6F |  |  |  |  |  | .344 | .391 | .405 | .512 | .606 |
| 6G |  |  |  |  |  |  | .333 | .403 | .292 | .301 |
| 6H |  |  |  |  |  |  |  | .394 | .368 | .447 |
| 6J |  |  |  |  |  |  |  |  | .469 | .454 |
| 6K |  |  |  |  |  |  |  |  |  | .431 |

Mean Kappa for librarian=.464

|  |  |  |
| --- | --- | --- |
|  | 6J | 6K |
| 6A | .473 | .449 |
| 6J |  | .469 |

Mean Kappa for faculty=.361

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6C | 6D | 6E | 6F | 6G | 6H | 6L |
| 6B | .269 | .334 | .170 | .310 | .358 | .169 | .295 |
| 6C |  | .338 | .374 | .297 | .493 | .453 | .397 |
| 6D |  |  | .305 | .512 | .305 | .458 | .414 |
| 6E |  |  |  | .311 | .346 | .424 | .363 |
| 6F |  |  |  |  | .344 | .391 | .606 |
| 6G |  |  |  |  |  | .333 | .301 |
| 6H |  |  |  |  |  |  | .447 |

**pairwise Kappa agreement on criterion code 21152:**

Mean Kappa for all judges=.442

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6B | 6C | 6D | 6E | 6F | 6G | 6H | 6J | 6K | 6L |
| 6A | .526 | .460 | .611 | .481 | .479 | .343 | .410 | .367 | .500 | .322 |
| 6B |  | .584 | .573 | .423 | .341 | .482 | .489 | .506 | .522 | .264 |
| 6C |  |  | .563 | .530 | .395 | .550 | .520 | .505 | .526 | .374 |
| 6D |  |  |  | .470 | .475 | .372 | .494 | .465 | .526 | .305 |
| 6E |  |  |  |  | .547 | .508 | .492 | .382 | .372 | .397 |
| 6F |  |  |  |  |  | .320 | .335 | .345 | .325 | .303 |
| 6G |  |  |  |  |  |  | .458 | .430 | .577 | .290 |
| 6H |  |  |  |  |  |  |  | .448 | .547 | .363 |
| 6J |  |  |  |  |  |  |  |  | .503 | .335 |
| 6K |  |  |  |  |  |  |  |  |  | .278 |

Mean Kappa for librarian=.457

|  |  |  |
| --- | --- | --- |
|  | 6J | 6K |
| 6A | .367 | .500 |
| 6J |  | .503 |

Mean Kappa for faculty=.436

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6C | 6D | 6E | 6F | 6G | 6H | 6L |
| 6B | .584 | .573 | .423 | .341 | .482 | .489 | .264 |
| 6C |  | .563 | .530 | .395 | .550 | .520 | .374 |
| 6D |  |  | .470 | .475 | .372 | .494 | .305 |
| 6E |  |  |  | .547 | .508 | .492 | .397 |
| 6F |  |  |  |  | .320 | .335 | .303 |
| 6G |  |  |  |  |  | .458 | .290 |
| 6H |  |  |  |  |  |  | .363 |

**Summary of Cohen’s Kappa**

|  |  |  |  |
| --- | --- | --- | --- |
| Criterion | Librarian (1) | Faculty (2) | All judges |
| 21150 | .282 | .466 | .417 |
| 21151 | .464 | .361 | .391 |
| 21152 | .457 | .436 | .442 |
| Total score | n/a | n/a | n/a |

1. **Pearson’s correlation**

**Pairwise correlation regarding criterion code “21150”**

Mean Correlation all judges=.730

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6B | 6C | 6D | 6E | 6F | 6G | 6H | 6J | 6K | 6L |
| 6A | .731\*\* | .820\*\* | .867\*\* | .827\*\* | .786\*\* | .834\*\* | .652\*\* | .787\*\* | .648\*\* | .803\*\* |
| 6B |  | .691\*\* | .810\*\* | .682\*\* | .756\*\* | .730\*\* | .592\*\* | .643\*\* | .665\*\* | .653\*\* |
| 6C |  |  | .871\*\* | .830\*\* | .811\*\* | .844\*\* | .642\*\* | .776\*\* | .698\*\* | .766\*\* |
| 6D |  |  |  | .833\*\* | .859\*\* | .884\*\* | .650\*\* | .804\*\* | .711\*\* | .819\*\* |
| 6E |  |  |  |  | .733\*\* | .847\*\* | .700\*\* | .747\*\* | .684\*\* | .742\*\* |
| 6F |  |  |  |  |  | .831\*\* | .549\*\* | .752\*\* | .670\*\* | .736\*\* |
| 6G |  |  |  |  |  |  | .642\*\* | .800\*\* | .659\*\* | .785\*\* |
| 6H |  |  |  |  |  |  |  | .575\*\* | .451\*\* | .561\*\* |
| 6J |  |  |  |  |  |  |  |  | .575\*\* | .748\*\* |
| 6K |  |  |  |  |  |  |  |  |  | .584\*\* |

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

Mean Correlation for librarian=.670

|  |  |  |
| --- | --- | --- |
|  | 6J | 6K |
| 6A | .787\*\* | .648\*\* |
| 6J |  | .575\*\* |

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

Mean correlation for faculty=.745

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6C | 6D | 6E | 6F | 6G | 6H | 6L |
| 6B | .691\*\* | .810\*\* | .682\*\* | .756\*\* | .730\*\* | .592\*\* | .653\*\* |
| 6C |  | .871\*\* | .830\*\* | .811\*\* | .844\*\* | .642\*\* | .766\*\* |
| 6D |  |  | .833\*\* | .859\*\* | .884\*\* | .650\*\* | .819\*\* |
| 6E |  |  |  | .733\*\* | .847\*\* | .700\*\* | .742\*\* |
| 6F |  |  |  |  | .831\*\* | .549\*\* | .736\*\* |
| 6G |  |  |  |  |  | .642\*\* | .785\*\* |
| 6H |  |  |  |  |  |  | .561\*\* |

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

**Pairwise correlation regarding criterion code “21151”**

Mean Correlation all judges=.617

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6B | 6C | 6D | 6E | 6F | 6G | 6H | 6J | 6K | 6L |
| 6A | .680\*\* | .665\*\* | .733\*\* | .702\*\* | .664\*\* | .663\*\* | .643\*\* | .651\*\* | .676\*\* | .691\*\* |
| 6B |  | .572\*\* | .700\*\* | .640\*\* | .644\*\* | .660\*\* | .629\*\* | .669\*\* | .664\*\* | .655\*\* |
| 6C |  |  | .554\*\* | .643\*\* | .458\*\* | .668\*\* | .625\*\* | .620\*\* | .522\*\* | .522\*\* |
| 6D |  |  |  | .549\*\* | .674\*\* | .578\*\* | .534\*\* | .600\*\* | .695\*\* | .542\*\* |
| 6E |  |  |  |  | .556\*\* | .675\*\* | .551\*\* | .631\*\* | .527\*\* | .579\*\* |
| 6F |  |  |  |  |  | .630\*\* | .554\*\* | .568\*\* | .674\*\* | .703\*\* |
| 6G |  |  |  |  |  |  | .643\*\* | .729\*\* | .531\*\* | .628\*\* |
| 6H |  |  |  |  |  |  |  | .574\*\* | .534\*\* | .520\*\* |
| 6J |  |  |  |  |  |  |  |  | .559\*\* | .578\*\* |
| 6K |  |  |  |  |  |  |  |  |  | .587\*\* |

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

Mean Correlation for librarian=.629

|  |  |  |
| --- | --- | --- |
|  | 6J | 6K |
| 6A | .651\*\* | .676\*\* |
| 6J |  | .559\*\* |

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

Mean correlation for faculty=.603

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6C | 6D | 6E | 6F | 6G | 6H | 6L |
| 6B | .572\*\* | .700\*\* | .640\*\* | .644\*\* | .660\*\* | .629\*\* | .655\*\* |
| 6C |  | .554\*\* | .643\*\* | .458\*\* | .668\*\* | .625\*\* | .522\*\* |
| 6D |  |  | .549\*\* | .674\*\* | .578\*\* | .534\*\* | .542\*\* |
| 6E |  |  |  | .556\*\* | .675\*\* | .551\*\* | .579\*\* |
| 6F |  |  |  |  | .630\*\* | .554\*\* | .703\*\* |
| 6G |  |  |  |  |  | .643\*\* | .628\*\* |
| 6H |  |  |  |  |  |  | .520\*\* |

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

**Pairwise correlation regarding criterion code “21152”**

Mean Correlation all judges=.684

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6B | 6C | 6D | 6E | 6F | 6G | 6H | 6J | 6K | 6L |
| 6A | .655\*\* | .679\*\* | .738\*\* | .706\*\* | .743\*\* | .697\*\* | .699\*\* | .540\*\* | .793\*\* | .659\*\* |
| 6B |  | .732\*\* | .716\*\* | .725\*\* | .692\*\* | .706\*\* | .656\*\* | .659\*\* | .698\*\* | .658\*\* |
| 6C |  |  | .688\*\* | .763\*\* | .710\*\* | .720\*\* | .690\*\* | .681\*\* | .664\*\* | .722\*\* |
| 6D |  |  |  | .720\*\* | .752\*\* | .628\*\* | .686\*\* | .692\*\* | .687\*\* | .651\*\* |
| 6E |  |  |  |  | .691\*\* | .729\*\* | .730\*\* | .706\*\* | .670\*\* | .733\*\* |
| 6F |  |  |  |  |  | .635\*\* | .631\*\* | .657\*\* | .670\*\* | .602\*\* |
| 6G |  |  |  |  |  |  | .677\*\* | .680\*\* | .749\*\* | .656\*\* |
| 6H |  |  |  |  |  |  |  | .583\*\* | .689\*\* | .612\*\* |
| 6J |  |  |  |  |  |  |  |  | .618\*\* | .688\*\* |
| 6K |  |  |  |  |  |  |  |  |  | .607\*\* |

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

Mean Correlation for librarian=.650

|  |  |  |
| --- | --- | --- |
|  | 6J | 6K |
| 6A | .540\*\* | .793\*\* |
| 6J |  | .618\*\* |

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

Mean correlation for faculty=.690

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6C | 6D | 6E | 6F | 6G | 6H | 6L |
| 6B | .732\*\* | .716\*\* | .725\*\* | .692\*\* | .706\*\* | .656\*\* | .658\*\* |
| 6C |  | .688\*\* | .763\*\* | .710\*\* | .720\*\* | .690\*\* | .722\*\* |
| 6D |  |  | .720\*\* | .752\*\* | .628\*\* | .686\*\* | .651\*\* |
| 6E |  |  |  | .691\*\* | .729\*\* | .730\*\* | .733\*\* |
| 6F |  |  |  |  | .635\*\* | .631\*\* | .602\*\* |
| 6G |  |  |  |  |  | .677\*\* | .656\*\* |
| 6H |  |  |  |  |  |  | .612\*\* |

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

**Pairwise correlation regarding total scores**

Mean Correlation all judges=.797

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6B | 6C | 6D | 6E | 6F | 6G | 6H | 6J | 6K | 6L |
| 6A | .841\*\* | .832\*\* | .870\*\* | .837\*\* | .832\*\* | .846\*\* | .816\*\* | .793\*\* | .785\*\* | .815\*\* |
| 6B |  | .788\*\* | .877\*\* | .766\*\* | .835\*\* | .800\*\* | .782\*\* | .796\*\* | .789\*\* | .760\*\* |
| 6C |  |  | .840\*\* | .843\*\* | .826\*\* | .858\*\* | .767\*\* | .817\*\* | .757\*\* | .777\*\* |
| 6D |  |  |  | .827\*\* | .876\*\* | .847\*\* | .798\*\* | .835\*\* | .780\*\* | .817\*\* |
| 6E |  |  |  |  | .757\*\* | .824\*\* | .776\*\* | .790\*\* | .740\*\* | .810\*\* |
| 6F |  |  |  |  |  | .848\*\* | .755\*\* | .808\*\* | .775\*\* | .752\*\* |
| 6G |  |  |  |  |  |  | .767\*\* | .836\*\* | .770\*\* | .827\*\* |
| 6H |  |  |  |  |  |  |  | .699\*\* | .699\*\* | .717\*\* |
| 6J |  |  |  |  |  |  |  |  | .707\*\* | .775\*\* |
| 6K |  |  |  |  |  |  |  |  |  | .701\*\* |

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

Mean Correlation for librarian=.762

|  |  |  |
| --- | --- | --- |
|  | 6J | 6K |
| 6A | .793\*\* | .785\*\* |
| 6J |  | .707\*\* |

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

Mean correlation for faculty=.804

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6C | 6D | 6E | 6F | 6G | 6H | 6L |
| 6B | .788\*\* | .877\*\* | .766\*\* | .835\*\* | .800\*\* | .782\*\* | .760\*\* |
| 6C |  | .840\*\* | .843\*\* | .826\*\* | .858\*\* | .767\*\* | .777\*\* |
| 6D |  |  | .827\*\* | .876\*\* | .847\*\* | .798\*\* | .817\*\* |
| 6E |  |  |  | .757\*\* | .824\*\* | .776\*\* | .810\*\* |
| 6F |  |  |  |  | .848\*\* | .755\*\* | .752\*\* |
| 6G |  |  |  |  |  | .767\*\* | .827\*\* |
| 6H |  |  |  |  |  |  | .717\*\* |

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

**Summary of Mean Pearson’s Correlation**

|  |  |  |  |
| --- | --- | --- | --- |
| criterion | Librarian (1) | Faculty (2) | All judges |
| 21150 | .670 | .745 | .730 |
| 21151 | .629 | .603 | .617 |
| 21152 | .650 | .690 | .684 |
| Total score | .762 | .804 | .797 |