

*RAILS
Institution #3 Data Analysis*
Bei Yu & Megan Oakleaf

Table: librarian: 1; faculty: 2

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| institute | A | B | C | D | E | F | G | H | J | K | L |
| 3 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

1. **Kripendorff’s Alpha measure:**

All judges:

|  |  |
| --- | --- |
|  | Kripendorff’s Alpha |
| criterion | All judges | Librarian(1) | Faculty(2) |
| 124366 | .1881 | .1740 | .1788 |
| 124367 | .2265 | .1967 | .2501 |
| 124368 | .1874 | .1173 | .2068 |
| Total score | .2395 | .2274 | .2430 |

1. **Cohen’s Kappa**

**pairwise Kappa agreement on criterion code 124366:**

Mean Kappa for all judges=.122

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3B | 3C | 3D | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3A | -.001 | .038 | .052 | .011 | .008 | .062 | -.031 | .090 | .114 | -.084 |
| 3B |  | .333 | .118 | -.066 | .161 | .340 | .322 | .125 | .004 | .358 |
| 3C |  |  | .194 | .002 | .152 | .294 | .245 | .170 | .107 | .367 |
| 3D |  |  |  | .076 | .146 | .015 | .077 | .150 | .409 | .039 |
| 3E |  |  |  |  | -.136 | -.084 | -.052 | .077 | .028 | -.145 |
| 3F |  |  |  |  |  | .223 | .232 | .098 | .093 | .100 |
| 3G |  |  |  |  |  |  | .236 | .192 | .035 | .454 |
| 3H |  |  |  |  |  |  |  | .138 | .083 | .271 |
| 3J |  |  |  |  |  |  |  |  | .274 | .061 |
| 3K |  |  |  |  |  |  |  |  |  | .118 |

Mean Kappa for librarian=.123

|  |  |  |
| --- | --- | --- |
|  | 3B | 3C |
| 3A | -.001 | .038 |
| 3B |  | .333 |

Mean Kappa for faculty=.115

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3D | .076 | .146 | .015 | .077 | .150 | .409 | .039 |
| 3E |  | -.136 | -.084 | -.052 | .077 | .028 | -.145 |
| 3F |  |  | .223 | .232 | .098 | .093 | .100 |
| 3G |  |  |  | .236 | .192 | .035 | .454 |
| 3H |  |  |  |  | .138 | .083 | .271 |
| 3J |  |  |  |  |  | .274 | .061 |
| 3K |  |  |  |  |  |  | .118 |

**pairwise Kappa agreement on criterion code 124367:**

Mean Kappa for all judges=.170

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3B | 3C | 3D | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3A | .022 | .107 | -.001 | .081 | .055 | .036 | .079 | .029 | .053 | .128 |
| 3B |  | .244 | .168 | -.088 | .203 | .304 | .351 | .329 | .206 | .306 |
| 3C |  |  | .183 | -.130 | .177 | .327 | .269 | .236 | .184 | .424 |
| 3D |  |  |  | .048 | .211 | .132 | .197 | .164 | .332 | .170 |
| 3E |  |  |  |  | -.123 | -.037 | -.067 | .031 | .070 | .002 |
| 3F |  |  |  |  |  | .170 | .146 | .116 | .300 | .175 |
| 3G |  |  |  |  |  |  | .314 | .352 | .199 | .490 |
| 3H |  |  |  |  |  |  |  | .238 | .208 | .415 |
| 3J |  |  |  |  |  |  |  |  | .305 | .242 |
| 3K |  |  |  |  |  |  |  |  |  | .286 |

Mean Kappa for librarian=.124

|  |  |  |
| --- | --- | --- |
|  | 3B | 3C |
| 3A | .022 | .107 |
| 3B |  | .244 |

Mean Kappa for faculty=.182

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3D | .048 | .211 | .132 | .197 | .164 | .332 | .170 |
| 3E |  | -.123 | -.037 | -.067 | .031 | .070 | .002 |
| 3F |  |  | .170 | .146 | .116 | .300 | .175 |
| 3G |  |  |  | .314 | .352 | .199 | .490 |
| 3H |  |  |  |  | .238 | .208 | .415 |
| 3J |  |  |  |  |  | .305 | .242 |
| 3K |  |  |  |  |  |  | .286 |

**pairwise Kappa agreement on criterion code 124368:**

Mean Kappa for all judges=.138

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3B | 3C | 3D | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3A | -.074 | .112 | -.009 | -.049 | .034 | -.024 | -.170 | .073 | .010 | -.005 |
| 3B |  | .199 | .121 | .032 | .255 | .279 | .349 | .181 | .152 | .322 |
| 3C |  |  | .114 | -.017 | .275 | .291 | .186 | .142 | .032 | .421 |
| 3D |  |  |  | .098 | .178 | .135 | .164 | .119 | .284 | .174 |
| 3E |  |  |  |  | -.006 | .008 | -.039 | -.083 | -.112 | -.006 |
| 3F |  |  |  |  |  | .276 | .259 | .206 | .231 | .157 |
| 3G |  |  |  |  |  |  | .269 | .166 | .195 | .386 |
| 3H |  |  |  |  |  |  |  | .175 | .206 | .274 |
| 3J |  |  |  |  |  |  |  |  | .212 | .182 |
| 3K |  |  |  |  |  |  |  |  |  | .239 |

Mean Kappa for librarian=.079

|  |  |  |
| --- | --- | --- |
|  | 3B | 3C |
| 3A | -.074 | .112 |
| 3B |  | .199 |

Mean Kappa for faculty=.155

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3D | .098 | .178 | .135 | .164 | .119 | .284 | .174 |
| 3E |  | -.006 | .008 | -.039 | -.083 | -.112 | -.006 |
| 3F |  |  | .276 | .259 | .206 | .231 | .157 |
| 3G |  |  |  | .269 | .166 | .195 | .386 |
| 3H |  |  |  |  | .175 | .206 | .274 |
| 3J |  |  |  |  |  | .212 | .182 |
| 3K |  |  |  |  |  |  | .239 |

**Summary of Cohen’s Kappa**

|  |  |  |  |
| --- | --- | --- | --- |
| criterion | Librarian(1) | Faculty(2) | All |
| 124366 | .123 | .115 | .122 |
| 124367 | .124 | .182 | .170 |
| 124368 | .079 | .155 | .138 |
| Total score | n/a | n/a | n/a |

1. **Pearson’s correlation**

**Pairwise correlation regarding criterion code “124366”**

Mean correlation for all judges=.212

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3B | 3C | 3D | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3A | .046 | .160 | .098 | -.067 | -.181 | .090 | -.076 | .159 | .068 | .035 |
| 3B |  | .506\*\* | .190 | -.051 | .346\*\* | .517\*\* | .529\*\* | .328\*\* | .192 | .535\*\* |
| 3C |  |  | .267\*\* | -.069 | .301\*\* | .472\*\* | .354\*\* | .398\*\* | .267\*\* | .541\*\* |
| 3D |  |  |  | .055 | -.004 | .179 | .212\* | .269\*\* | .551\*\* | .235\*\* |
| 3E |  |  |  |  | -.221\* | -.175 | -.086 | -.103 | -.103 | -.132 |
| 3F |  |  |  |  |  | .461\*\* | .307\*\* | .039 | .114 | .476\*\* |
| 3G |  |  |  |  |  |  | .436\*\* | .335\*\* | .283\*\* | .608\*\* |
| 3H |  |  |  |  |  |  |  | .285\*\* | .182 | .428\*\* |
| 3J |  |  |  |  |  |  |  |  | .367\*\* | .363\*\* |
| 3K |  |  |  |  |  |  |  |  |  | .343\*\* |

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

\*. Correlation is significant at the 0.05 level

Mean correlation for librarian=.237

|  |  |  |
| --- | --- | --- |
|  | 3B | 3C |
| 3A | .046 | .160 |
| 3B |  | .506\*\* |

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

Mean correlation for faculty=.204

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3D | .055 | -.004 | .179 | .212\* | .269\*\* | .551\*\* | .235\*\* |
| 3E |  | -.221\* | -.175 | -.086 | -.103 | -.103 | -.132 |
| 3F |  |  | .461\*\* | .307\*\* | .039 | .114 | .476\*\* |
| 3G |  |  |  | .436\*\* | .335\*\* | .283\*\* | .608\*\* |
| 3H |  |  |  |  | .285\*\* | .182 | .428\*\* |
| 3J |  |  |  |  |  | .367\*\* | .363\*\* |
| 3K |  |  |  |  |  |  | .343\*\* |

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

\*. Correlation is significant at the 0.05 level

**Pairwise correlation regarding criterion code “124367”**

Mean correlation for all judges=.276

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3B | 3C | 3D | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3A | .112 | .117 | -.023 | .061 | .004 | -.011 | .047 | .162 | .118 | .077 |
| 3B |  | .447\*\* | .247\* | -.024 | .342\*\* | .507\*\* | .555\*\* | .468\*\* | .385\*\* | .496\*\* |
| 3C |  |  | .286\*\* | -.145 | .359\*\* | .490\*\* | .410\*\* | .386\*\* | .343\*\* | .574\*\* |
| 3D |  |  |  | -.022 | .290\*\* | .329\*\* | .363\*\* | .366\*\* | .524\*\* | .423\*\* |
| 3E |  |  |  |  | -.090 | -.153 | -.009 | .079 | -.050 | -.083 |
| 3F |  |  |  |  |  | .367\*\* | .356\*\* | .253\* | .434\*\* | .371\*\* |
| 3G |  |  |  |  |  |  | .440\*\* | .468\*\* | .378\*\* | .626\*\* |
| 3H |  |  |  |  |  |  |  | .446\*\* | .418\*\* | .585\*\* |
| 3J |  |  |  |  |  |  |  |  | .429\*\* | .426\*\* |
| 3K |  |  |  |  |  |  |  |  |  | .446\*\* |

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

\*. Correlation is significant at the 0.05 level

Mean correlation for librarian=.225

|  |  |  |
| --- | --- | --- |
|  | 3B | 3C |
| 3A | .112 | .117 |
| 3B |  | .447\*\* |

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

Mean correlation for faculty=.300

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3D | -.022 | .290\*\* | .329\*\* | .363\*\* | .366\*\* | .524\*\* | .423\*\* |
| 3E |  | -.090 | -.153 | -.009 | .079 | -.050 | -.083 |
| 3F |  |  | .367\*\* | .356\*\* | .253\* | .434\*\* | .371\*\* |
| 3G |  |  |  | .440\*\* | .468\*\* | .378\*\* | .626\*\* |
| 3H |  |  |  |  | .446\*\* | .418\*\* | .585\*\* |
| 3J |  |  |  |  |  | .429\*\* | .426\*\* |
| 3K |  |  |  |  |  |  | .446\*\* |

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

\*. Correlation is significant at the 0.05 level

**Pairwise correlation regarding criterion code “124368”**

Mean correlation for all judges=.214

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3B | 3C | 3D | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3A | -.047 | .141 | -.142 | -.088 | -.075 | -.105 | -.150 | -.023 | -.084 | .040 |
| 3B |  | .317\*\* | .227\* | -.038 | .417\*\* | .489\*\* | .487\*\* | .363\*\* | .339\*\* | .563\*\* |
| 3C |  |  | .226\* | -.160 | .468\*\* | .497\*\* | .409\*\* | .118 | .197\* | .533\*\* |
| 3D |  |  |  | .170 | .109 | .194 | .157 | .291\*\* | .387\*\* | .314\*\* |
| 3E |  |  |  |  | -.231\* | -.115 | -.123 | -.042 | -.132 | -.148 |
| 3F |  |  |  |  |  | .521\*\* | .350\*\* | .221\* | .366\*\* | .549\*\* |
| 3G |  |  |  |  |  |  | .448\*\* | .295\*\* | .284\*\* | .578\*\* |
| 3H |  |  |  |  |  |  |  | .315\*\* | .272\*\* | .482\*\* |
| 3J |  |  |  |  |  |  |  |  | .424\*\* | .412\*\* |
| 3K |  |  |  |  |  |  |  |  |  | .497\*\* |

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

\*. Correlation is significant at the 0.05 level

Mean correlation for librarian=.137

|  |  |  |
| --- | --- | --- |
|  | 3B | 3C |
| 3A | -.047 | .141 |
| 3B |  | .317\*\* |

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

Mean correlation for faculty=.244

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3D | .170 | .109 | .194 | .157 | .291\*\* | .387\*\* | .314\*\* |
| 3E |  | -.231\* | -.115 | -.123 | -.042 | -.132 | -.148 |
| 3F |  |  | .521\*\* | .350\*\* | .221\* | .366\*\* | .549\*\* |
| 3G |  |  |  | .448\*\* | .295\*\* | .284\*\* | .578\*\* |
| 3H |  |  |  |  | .315\*\* | .272\*\* | .482\*\* |
| 3J |  |  |  |  |  | .424\*\* | .412\*\* |
| 3K |  |  |  |  |  |  | .497\*\* |

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

\*. Correlation is significant at the 0.05 level

**Pairwise correlation regarding total scores**

Mean correlation for all judges=.270

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3B | 3C | 3D | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3A | .073 | .146 | -.017 | -.056 | -.085 | -.038 | -.071 | .113 | .063 | .066 |
| 3B |  | .491\*\* | .234\* | -.037 | .415\*\* | .577\*\* | .604\*\* | .471\*\* | .360\*\* | .581\*\* |
| 3C |  |  | .317\*\* | -.135 | .447\*\* | .560\*\* | .437\*\* | .348\*\* | .345\*\* | .583\*\* |
| 3D |  |  |  | .056 | .135 | .261\*\* | .308\*\* | .380\*\* | .611\*\* | .354\*\* |
| 3E |  |  |  |  | -.205\* | -.169 | -.097 | -.018 | -.105 | -.134 |
| 3F |  |  |  |  |  | .528\*\* | .392\*\* | .197\* | .314\*\* | .519\*\* |
| 3G |  |  |  |  |  |  | .487\*\* | .447\*\* | .387\*\* | .655\*\* |
| 3H |  |  |  |  |  |  |  | .402\*\* | .383\*\* | .539\*\* |
| 3J |  |  |  |  |  |  |  |  | .454\*\* | .480\*\* |
| 3K |  |  |  |  |  |  |  |  |  | .522\*\* |

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

\*. Correlation is significant at the 0.05 level

Mean correlation for librarian=.237

|  |  |  |
| --- | --- | --- |
|  | 3B | 3C |
| 3A | .073 | .146 |
| 3B |  | .491\*\* |

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

Mean correlation for faculty=.289

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3E | 3F | 3G | 3H | 3J | 3K | 3L |
| 3D | .056 | .135 | .261\*\* | .308\*\* | .380\*\* | .611\*\* | .354\*\* |
| 3E |  | -.205\* | -.169 | -.097 | -.018 | -.105 | -.134 |
| 3F |  |  | .528\*\* | .392\*\* | .197\* | .314\*\* | .519\*\* |
| 3G |  |  |  | .487\*\* | .447\*\* | .387\*\* | .655\*\* |
| 3H |  |  |  |  | .402\*\* | .383\*\* | .539\*\* |
| 3J |  |  |  |  |  | .454\*\* | .480\*\* |
| 3K |  |  |  |  |  |  | .522\*\* |

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

\*. Correlation is significant at the 0.05 level

**Summary of Mean Pearson’s Correlation**

|  |  |  |  |
| --- | --- | --- | --- |
| Criterion | Librarian(1) | Faculty(2) | All judges |
| 124366 | .237 | .204 | .212 |
| 124367 | .225 | .300 | .276 |
| 124368 | .137 | .244 | .214 |
| Total  | .237 | .289 | .270 |