**Appendix 1.** Adjective-noun collocations used in the current study

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| high frequency – high MI bin | | | high frequency – mid MI bin | | | high frequency – low MI bin | | |
| Collocation | Freq | MI | Collocation | Freq | MI | Collocation | Freq | MI |
| different ways | 2.5 | 8.1 | common sense | 2.4 | 7.6 | wide variety | 2.2 | 5.9 |
| front door | 2.8 | 9.0 | different types | 2.4 | 7.7 | new technology | 2.2 | 5.9 |
| civil war | 2.7 | 8.9 | early days | 2.3 | 7.1 | public interest | 2.2 | 5.8 |
| good idea | 2.9 | 9.4 | European countries | 2.2 | 6.1 | legal aid | 2.2 | 5.8 |
| good news | 2.5 | 8.0 | foreign affairs | 2.3 | 6.9 | disabled people | 2.2 | 5.8 |
| hard work | 2.5 | 8.3 | high quality | 2.5 | 7.7 | vast majority | 2.2 | 5.7 |
| political parties | 2.5 | 8.4 | hot water | 2.3 | 6.7 | economic growth | 2.2 | 5.7 |
| human rights | 3.1 | 9.8 | important part | 2.4 | 7.3 | economic development | 2.1 | 5.6 |
| large numbers | 2.5 | 8.4 | small number | 2.3 | 6.5 | good thing | 2.1 | 5.6 |
| local government | 3.6 | 11.6 | little girl | 2.3 | 6.6 | real life | 2.1 | 5.3 |
| long time | 3.8 | 12.0 | local people | 2.3 | 6.8 | real world | 2.1 | 5.3 |
| new year | 2.7 | 8.8 | mental health | 2.2 | 6.3 | high speed | 2.1 | 5.1 |
| old age | 2.6 | 8.7 | nuclear weapons | 2.3 | 7.1 | low level | 2.0 | 4.8 |
| other things | 3.1 | 9.7 | other members | 2.4 | 7.4 | certain amount | 2.1 | 4.9 |
| other countries | 2.7 | 8.9 | developing countries | 2.3 | 6.6 | social life | 2.0 | 4.7 |
| recent years | 3.3 | 10.9 | public relations | 2.3 | 6.8 | political system | 2.0 | 4.7 |
| rural areas | 2.5 | 8.3 | public transport | 2.2 | 6.0 | financial services | 2.0 | 4.5 |
| social security | 3.1 | 9.8 | short time | 2.4 | 7.5 | good reason | 2.0 | 4.4 |
| wide range | 3.3 | 10.8 | white paper | 2.4 | 7.6 | good job | 2.0 | 4.2 |
| young man | 3.3 | 10.6 | young children | 2.5 | 8.0 | old lady | 2.0 | 3.7 |

(Continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| mid frequency – high MI bin | | | mid frequency – mid MI bin | | | mid frequency – low MI bin | | |
| Collocation | Freq | MI | Collocation | Freq | MI | Collocation | Freq | MI |
|  |  |  |  |  |  |  |  |  |
| varying degrees | 1.2 | 13.0 | close friend | 1.2 | 6.6 | extra time | 1.1 | 4.2 |
| minimum wage | 1.4 | 11.1 | dark hair | 1.5 | 7.9 | full year | 1.1 | 3.4 |
| diplomatic relations | 1.5 | 11.0 | economic reform | 1.2 | 7.8 | good condition | 1.4 | 5.8 |
| mental illness | 1.3 | 10.9 | final decision | 1.2 | 6.7 | good practice | 1.6 | 5.0 |
| equal opportunities | 1.6 | 10.3 | financial support | 1.5 | 6.5 | good chance | 1.2 | 5.0 |
| sexual abuse | 1.2 | 10.3 | foreign language | 1.4 | 7.0 | good health | 1.3 | 4.1 |
| advisory committee | 1.2 | 10.1 | good fortune | 1.2 | 7.6 | late night | 1.3 | 5.6 |
| opposite direction | 1.4 | 9.7 | high risk | 1.6 | 6.4 | major changes | 1.2 | 5.8 |
| personal computer | 1.5 | 9.5 | high technology | 1.2 | 6.0 | major problem | 1.4 | 5.6 |
| national parks | 1.2 | 9.2 | international trade | 1.3 | 6.3 | major part | 1.5 | 4.7 |
| foreign currency | 1.3 | 9.2 | local residents | 1.1 | 7.5 | new building | 1.1 | 3.6 |
| various kinds | 1.2 | 8.8 | low income | 1.3 | 7.2 | new job | 1.2 | 3.5 |
| regular basis | 1.5 | 8.7 | main reason | 1.4 | 6.4 | only reason | 1.2 | 3.5 |
| bad weather | 1.2 | 8.5 | main street | 1.2 | 6.1 | previous day | 1.5 | 5.7 |
| large amounts | 1.4 | 8.5 | modern art | 1.2 | 7.3 | public school | 1.2 | 4.4 |
| economic recovery | 1.2 | 8.4 | natural resources | 1.2 | 7.8 | right side | 1.4 | 3.6 |
| medical treatment | 1.4 | 8.4 | short distance | 1.1 | 7.6 | similar way | 1.1 | 4.0 |
| significant differences | 1.1 | 8.3 | short period | 1.4 | 6.1 | small town | 1.3 | 5.5 |
| environmental issues | 1.2 | 8.3 | straight line | 1.4 | 7.3 | social problems | 1.2 | 4.9 |
| small businesses | 1.5 | 8.2 | total cost | 1.2 | 6.4 | wrong way | 1.4 | 4.7 |

(Continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| low frequency – high MI bin | | | low frequency – mid MI bin | | | low frequency – low MI bin | | |
| Collocation | Freq | MI | Collocation | Freq | MI | Collocation | Freq | MI |
|  |  |  |  |  |  |  |  |  |
| advanced courses | 0.7 | 8.9 | average cost | 0.6 | 6.3 | available information | 0.1 | 3.4 |
| alcoholic drinks | 0.3 | 12.6 | basic skills | 0.2 | 6.9 | basic training | 0.3 | 5.9 |
| blond hair | 0.3 | 11.0 | direct link | 0.2 | 7.6 | big difference | 0.6 | 5.9 |
| bright colors | 0.2 | 9.0 | early childhood | 0.6 | 7.5 | cold air | 0.4 | 5.9 |
| classical music | 0.4 | 8.1 | economic decline | 0.2 | 6.7 | current situation | 0.3 | 5.8 |
| commercial banks | 0.5 | 8.2 | sunny day | 0.3 | 7.6 | efficient way | 0.2 | 5.0 |
| happy ending | 0.2 | 8.7 | equal rights | 0.1 | 7.1 | good wishes | 0.2 | 5.6 |
| historic buildings | 0.6 | 10.1 | extra cost | 0.4 | 6.1 | large family | 0.4 | 3.6 |
| married couples | 0.7 | 10.3 | financial crisis | 0.1 | 6.8 | long journey | 0.6 | 5.9 |
| mental disorder | 0.5 | 10.7 | high temperatures | 0.3 | 7.7 | long tradition | 0.3 | 5.3 |
| mixed feelings | 0.1 | 8.9 | hot weather | 0.2 | 7.7 | low prices | 0.2 | 5.8 |
| musical instruments | 0.3 | 10.5 | key factor | 0.6 | 7.7 | past experience | 0.6 | 5.1 |
| narrow streets | 0.1 | 8.9 | poor performance | 0.3 | 6.1 | poor health | 0.2 | 5.0 |
| Olympic games | 0.6 | 11.1 | popular culture | 0.6 | 7.7 | present situation | 0.4 | 5.2 |
| racial discrimination | 0.1 | 11.7 | positive attitude | 0.2 | 7.8 | rural life | 0.2 | 5.1 |
| serious injury | 0.5 | 8.1 | public awareness | 0.3 | 6.5 | small piece | 0.3 | 4.9 |
| skilled workers | 0.4 | 8.9 | shallow water | 0.3 | 8.0 | standard form | 0.4 | 5.0 |
| soft drinks | 0.4 | 10.0 | short stories | 0.5 | 7.2 | strong feeling | 0.1 | 5.7 |
| warm welcome | 0.6 | 8.6 | significant changes | 0.7 | 6.4 | sufficient time | 0.3 | 3.7 |
| wild animals | 0.6 | 8.4 | similar pattern | 0.3 | 6.2 | true love | 0.2 | 5.0 |

*Note:* Freq refers to collocation frequency, measured by logged number of occurrences per million words of the whole adjective-noun collocation. MI refers to contingency strength of the collocations measured by mutual information.

**Appendix 2.** Descriptive statistics for the aptitude measures

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Task | Mean | SD | Min | Max | Possible  Max | Reliability |
| LLAMA B | 57.5 | 20.5 | 10 | 100 | 100 | .79 |
| LLAMA D | 29.5 | 14.7 | 5 | 60 | 75 | .46 |
| LLAMA F | 65.5 | 23.2 | 10 | 90 | 100 | .73 |
| 3TC | 55.6 | 26.8 | 10 | 103 | 120 | .62 |
| OSPAN | 0.62 | 0.14 | 0.23 | 0.91 | 1 | .80 |
| SRT | 2.7 | 1.7 | 0 | 6 | 6 | .59 |

**Appendix 3.** Correlations between the aptitude measures

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | SRT | 3-Term | WMC | LLAMA B | LLAMA F | LLAMA D |
| SRT | — |  |  |  |  |  |
| 3-Term | .09 | — |  |  |  |  |
| WMC | .15 | .42 | — |  |  |  |
| LLAMA B | .21 | .46 | .35 | — |  |  |
| LLAMA F | .10 | .45 | .42 | 0.51 | — |  |
| LLAMA D | .14 | .09 | .09 | .34 | .33 | — |

**Appendix 4.** Correlations between the aptitude measures and PJT performance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measure | L1 speaker | | L2 speaker | |
| RT | Accuracy | RT | Accuracy |
| SRT | -.22 | .28 | .04 | -.05 |
| 3-Term | -.06 | .22 | -.01 | .33 |
| WMC | -.16 | .23 | -.09 | .00 |
| LLAMA B | -.09 | -.11 | -.01 | .12 |
| LLAMA F | .09 | .16 | -.02 | .37 |
| LLAMA D | -.11 | -.01 | .04 | .25 |