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| Table I. Pokémon Variables and Definitions | | | |
|  |  |  | Description |
| Dependent Variables |  |  |  |
| Total | Sum of all stats, a measure of overall strength | | |
|  |  | | |
| Independent Variables |  | | |
| Pokémon Type | Pokémon category | | |
| HP | How much damage a Pokémon can withstand | | |
| Attack | Base modifier for normal attacks | | |
| Defense | Damage resistance against normal attacks | | |
| Special Attack | Modifier for type-specific attacks | | |
| Special Defense | Resistance against opposing Pokémon’s type-specific attacks | | |
| Speed | Pokémon with the higher speed attacks first | | |
| Legendary | = 0, 1; if the Pokémon is legendary | | |
| Generation | Generation the Pokémon was first seen in | | |
| Evolution | Pokémon’s evolution | | |



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| Table II. Pokémon Types, Priors, and Justifications | | | |
| Pokémon Type | N | Priors | Justification |
| Bug | 69 |  | Bug types are below average, there is low assurance in this though. |
| Dark | 31 |  | Dark types are slightly better than average, there is low assurance in this |
| Dragon | 32 |  | Dragon types are very good, high assurance in this answer. |
| Electric | 43 |  | Electric types are average, average assurance in this answer. |
| Fairy | 17 |  | Fairy types are below average, there is low assurance in this. |
| Fighting | 27 |  | Fighting types are slightly above average, average assurance |
| Fire | 52 |  | Fire types are slightly above average, average assurance |
| Flying | 3 |  | Flying types are good, high assurance in this answer |
| Ghost | 25 |  | Ghost types are average, average assurance in this answer |
| Grass | 70 |  | Grass types are below average, average assurance in this answer |
| Ground | 31 |  | Ground types are below average, average assurance in this answer |
| Ice | 24 |  | Ice types are average, average assurance in this answer. |
| Normal | 98 |  | Normal types are far below average, high assurance in this answer. |
| Poison | 28 |  | Poison types are below average, average assurance in this answer. |
| Psychic | 53 |  | Psychic types are slightly above average, average assurance in this |
| Rock | 44 |  | Rock types are below average, average assurance in this |
| Steel | 26 |  | Steel types are average, average assurance in this answer |
| Water | 111 |  | Water types are average, average assurance in this answer |
|  |  |  | Average stats vary a lot by type, so we would like the upper bound to be as large as possible. |
|  |  |  |  |
| Controls |  |  |  |
| Legendary | 58 |  | Legendary Pokémon are all quite a bit stronger than normal Pokémon, low assurance in this. |
| Evolution | 4 |  | A Pokémon evolving increases its stats greatly, though there is low assurance in this. |



Fan rotom- 520

Mega Charizard- 634

Tornadus- 580

Golem- 495

Shroomish- 295

2524

504.8

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| Table III. Mean Total Stats and Pokémon Count by Evolution | | |
| Evolution | Pokémon Count | Mean Total Stats |
| 1 | 376 | 377.67 |
| 2 | 289 | 463.13 |
| 3 | 103 | 522.29 |
| 4 | 16 | 633.94 |



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| Table IV. Estimated Average Total Stats by Type, Evolution and Legendary Controls | | |
| Pokemon Type | Mean Total Stats | 95% Assurance Interval |
| Bug | 399.99 | (399.80, 400.18) |
| Dark | 382.90 | (355.22, 411.38) |
| Dragon | 398.78 | (370.78, 427.48) |
| Electric | 365.00 | (341.46, 389.49) |
| Fairy | 346.37 | (309.49, 383.45) |
| Fighting | 362.99 | (334.03, 392.81) |
| Fire | 362.62 | (340.80, 384.54) |
| Flying | 412.18 | (346.81, 478.31) |
| Ghost | 366.56 | (336.02, 397.10) |
| Grass | 347.68 | (328.59, 366.81) |
| Ground | 359.23 | (331.70, 386.55) |
| Ice | 358.30 | (326.57, 389.14) |
| Normal | 356.81 | (341.36, 372.18) |
| Poison | 354.53 | (325.85, 383.37) |
| Psychic | 362.39 | (340.40, 385.15) |
| Rock | 382.85 | (359.37, 406.96) |
| Steel | 377.10 | (347.23, 407.62) |
| Water | 362.62 | (347.25, 378.04) |

