

# ANÁLISE ESTATÍSTICA DAS ESTATÍSTICAS DE POKÉMON

Lauro Hiroshi Pimentel Masuda - 9875437

Silas Fernandes Moreira – 9761718

Victor Gomes de Oliveira Martins Nicola - 9844881

# Estadísticas Pokémon



Lauro H. P. Masuda - 9875437  
Silas F. Moreira - 9761718  
Victor G. O. M. Nicola - 9844881

# Banco de Dados

Nome:

Pokemon with stats

Fonte:

- . Site oficial Pokemon (pokemon.com)
- . Pokemon Database (pokemondb.net)
- . Bulbapedia (bulbapedia.bulbagarden.net/)

# População e Amostra

- Todos os Pokémon da primeira até a sexta geração
- Os dados são dos jogos para *gameboy*
- Total: 800 Pokémon

# Variáveis

- 9 variáveis
- 2 qualitativas nominais
- 7 quantitativas discretas
- Não ha *missing data*
- Dados brutos

# Variáveis

## Quantitativas

- Pontos de Vida
- Ataque
- Defesa
- Ataque Especial
- Defesa Especial
- Velocidade
- Geracao

# Variáveis

## Qualitativas

- Tipos 1 e 2
- Lendários

# Códigos em R

```
library(ggplot2)
```

```
nomes = colnames(Pokemon)
```

```
nome = ggplot(Pokemon, aes(factor(Generation), Total))  
      + geom_boxplot(aes(colour = factor(Generation)))
```

```
nome = nome + xlab("Generation")+ylab("Total")  
             +labs(colour = "Generation")
```

```
print(nome)
```

```
# Gera o boxplot do "Total" (soma das  
variáveis quantitativas) por geração
```



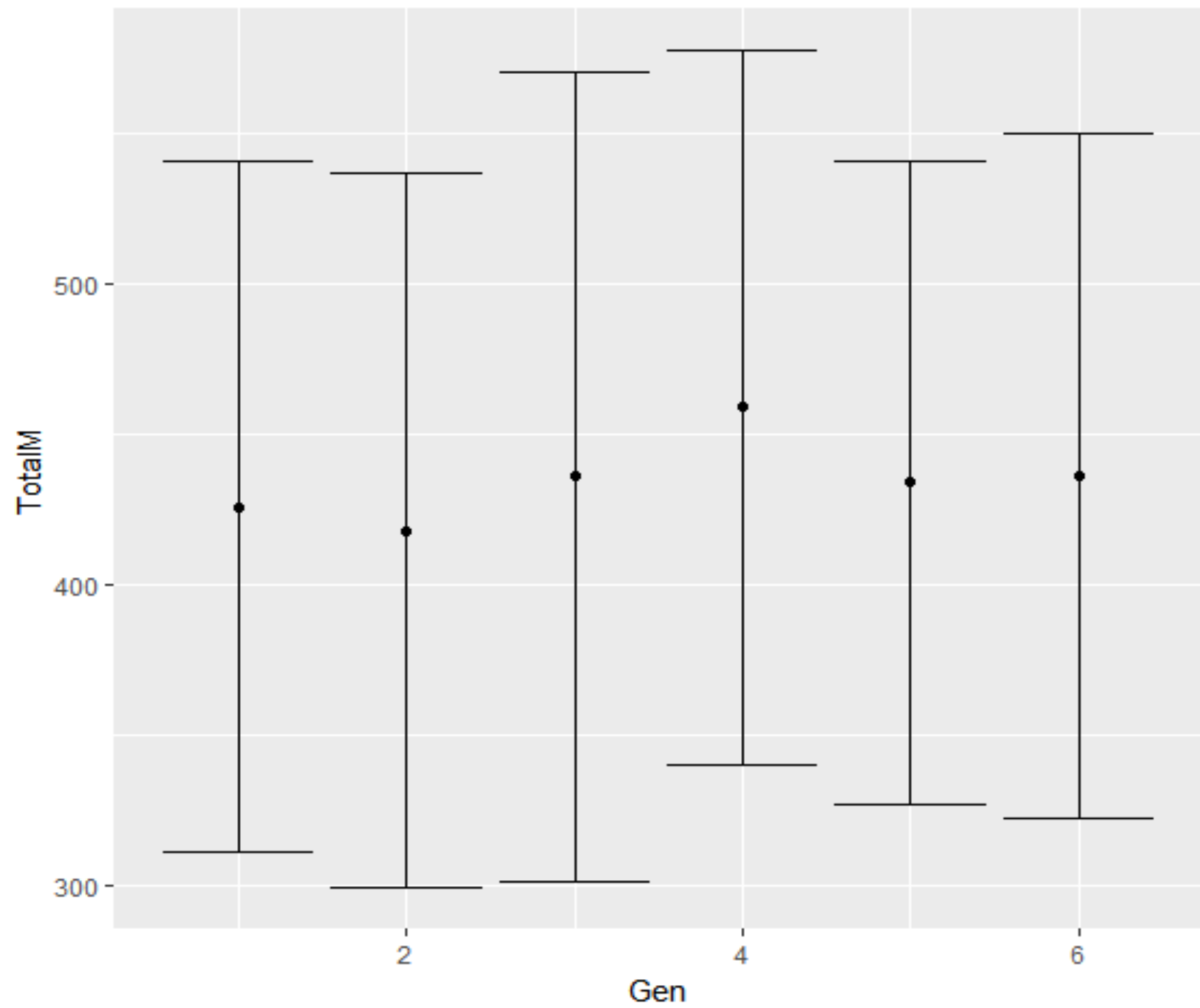
# Códigos em R

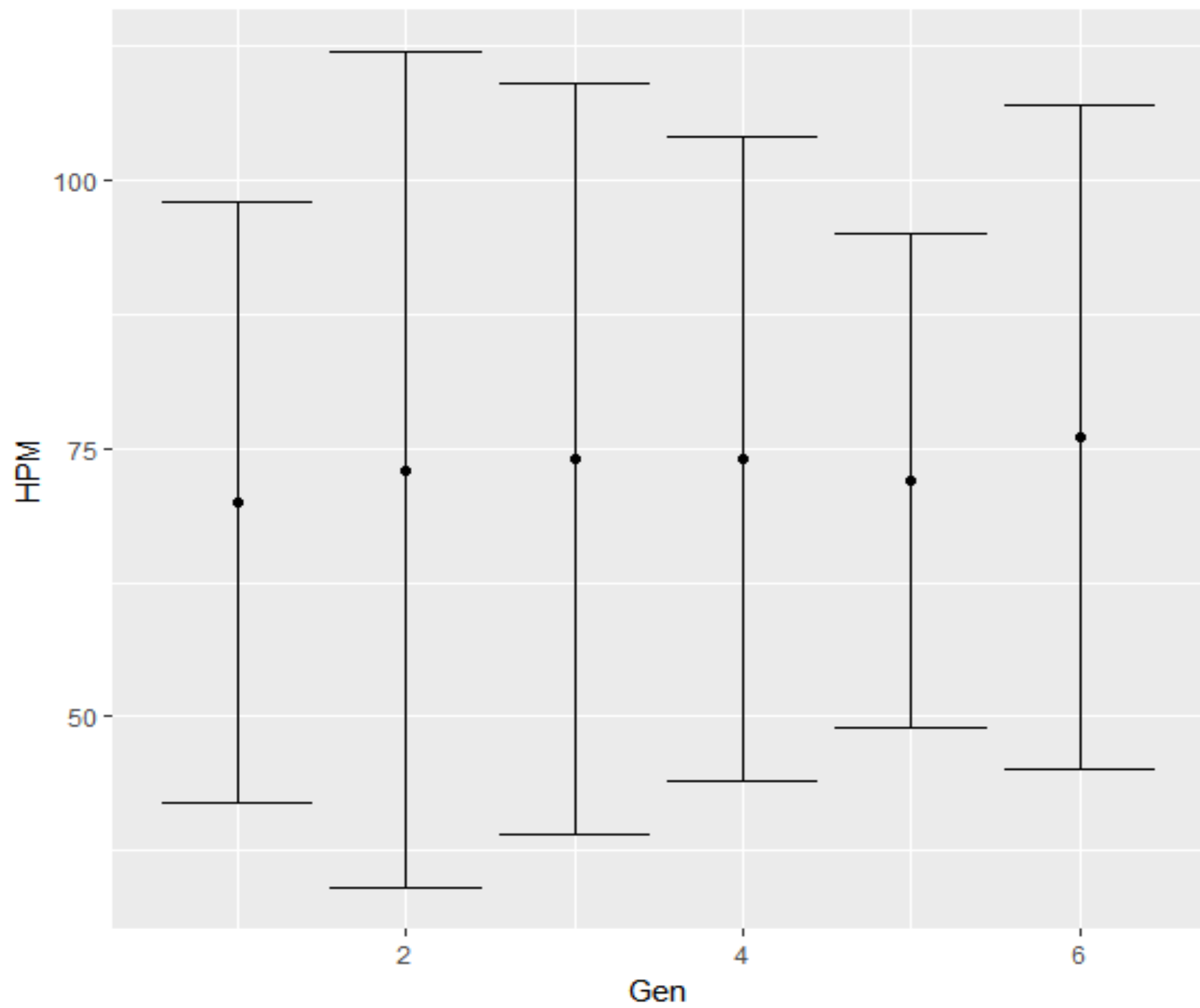
```
for (b in 6:11) {  
  y = Pokemon[b];  
  nome = ggplot(Pokemon, aes(factor(Generation), y))  
    + geom_boxplot(aes(colour =factor(Generation)))  
  nome = nome + xlab("Generation")  
    + ylab(nomes[b])+labs(colour = "Generation")  
  print(nome)  
}
```

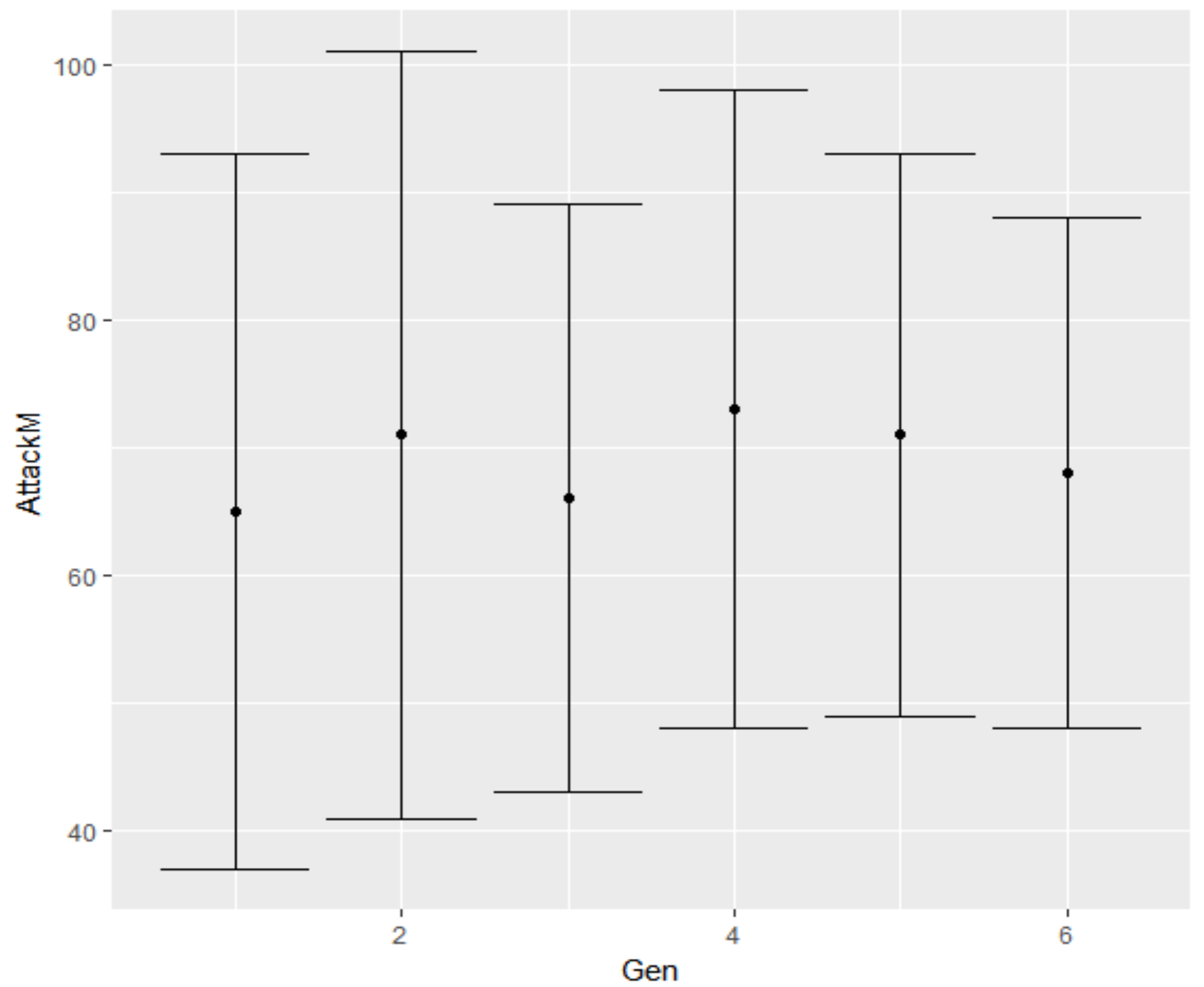
# Gera os boxplots para todas as variáveis quantitativas, por geração

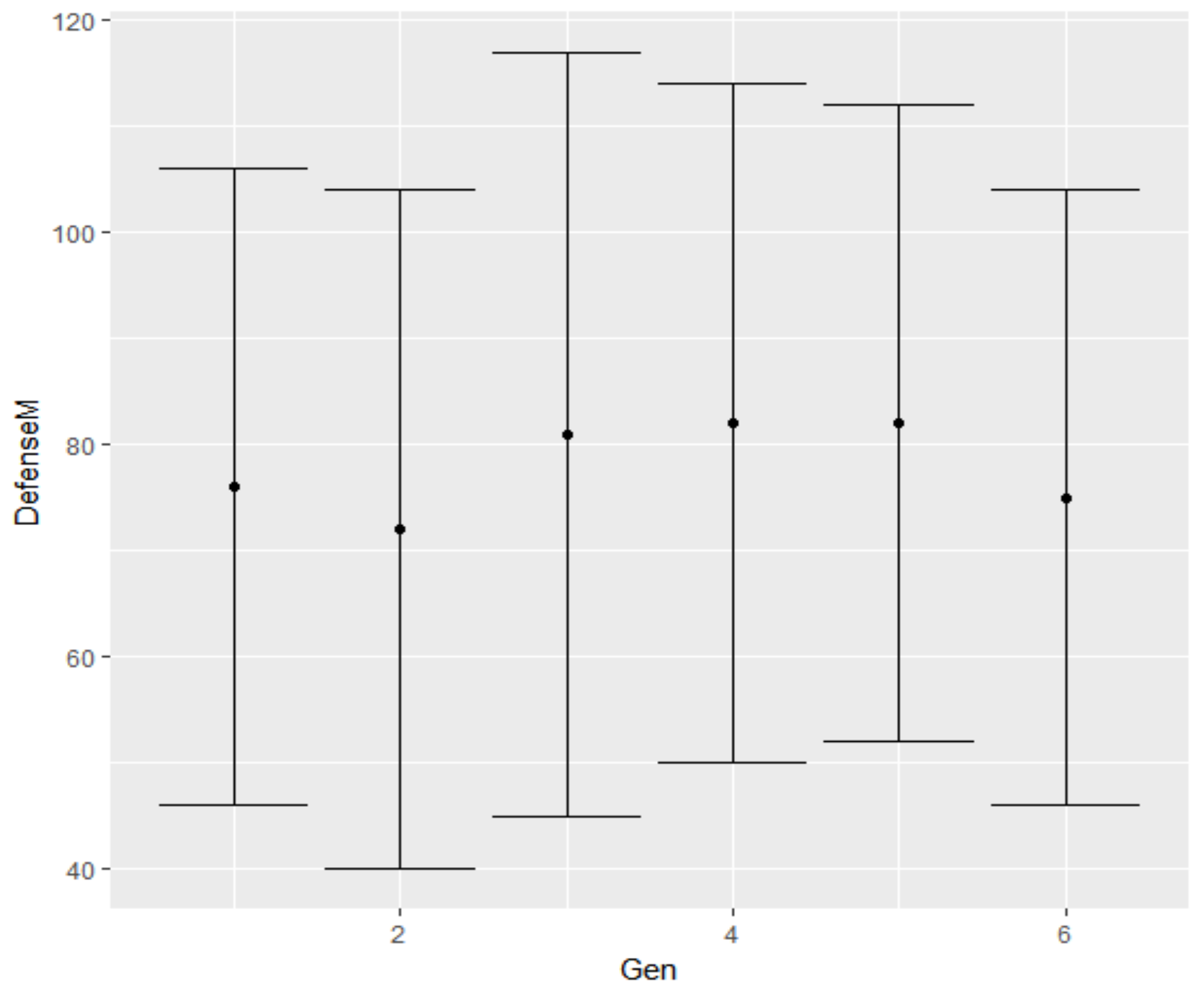
# Gráficos



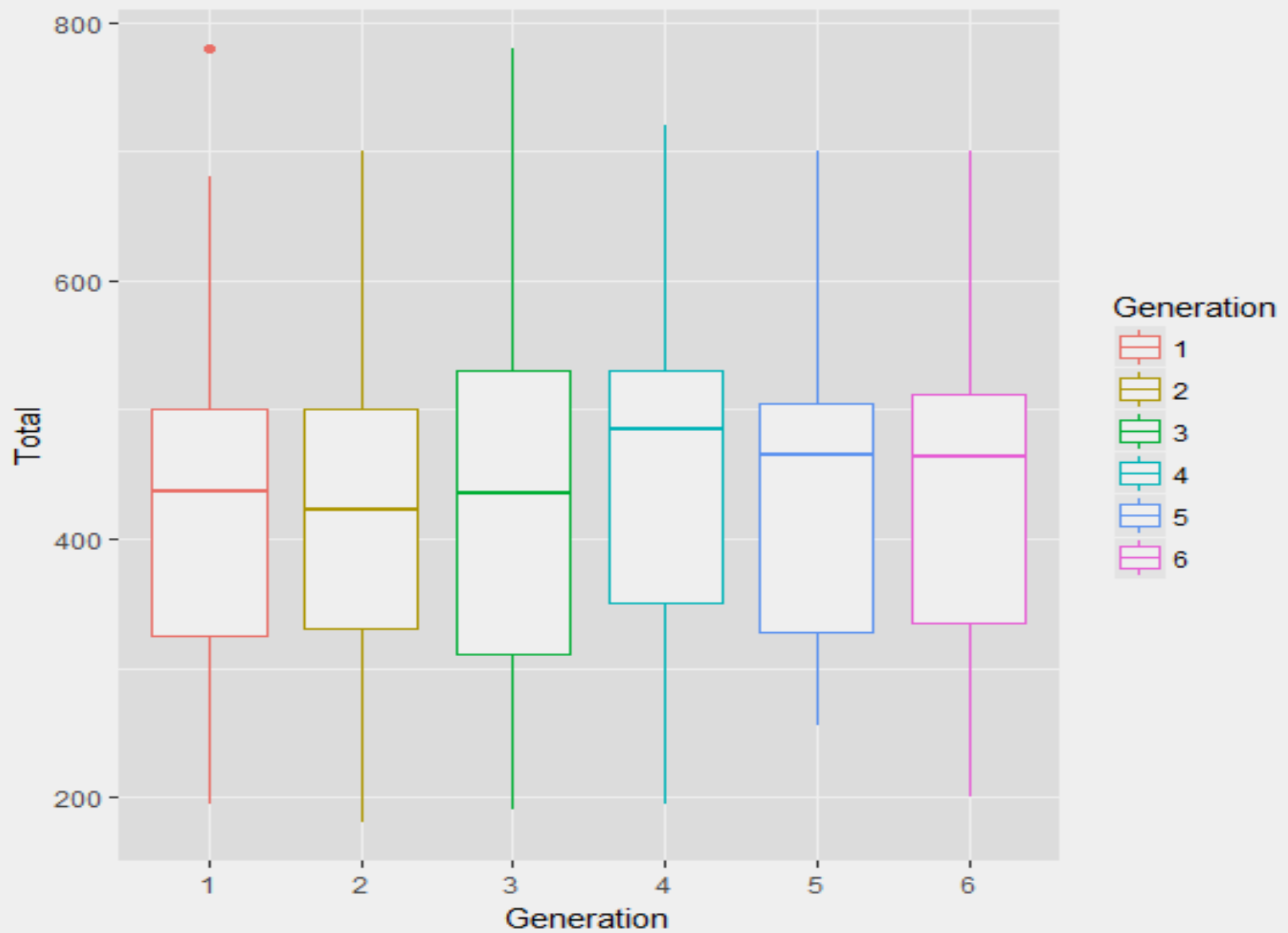




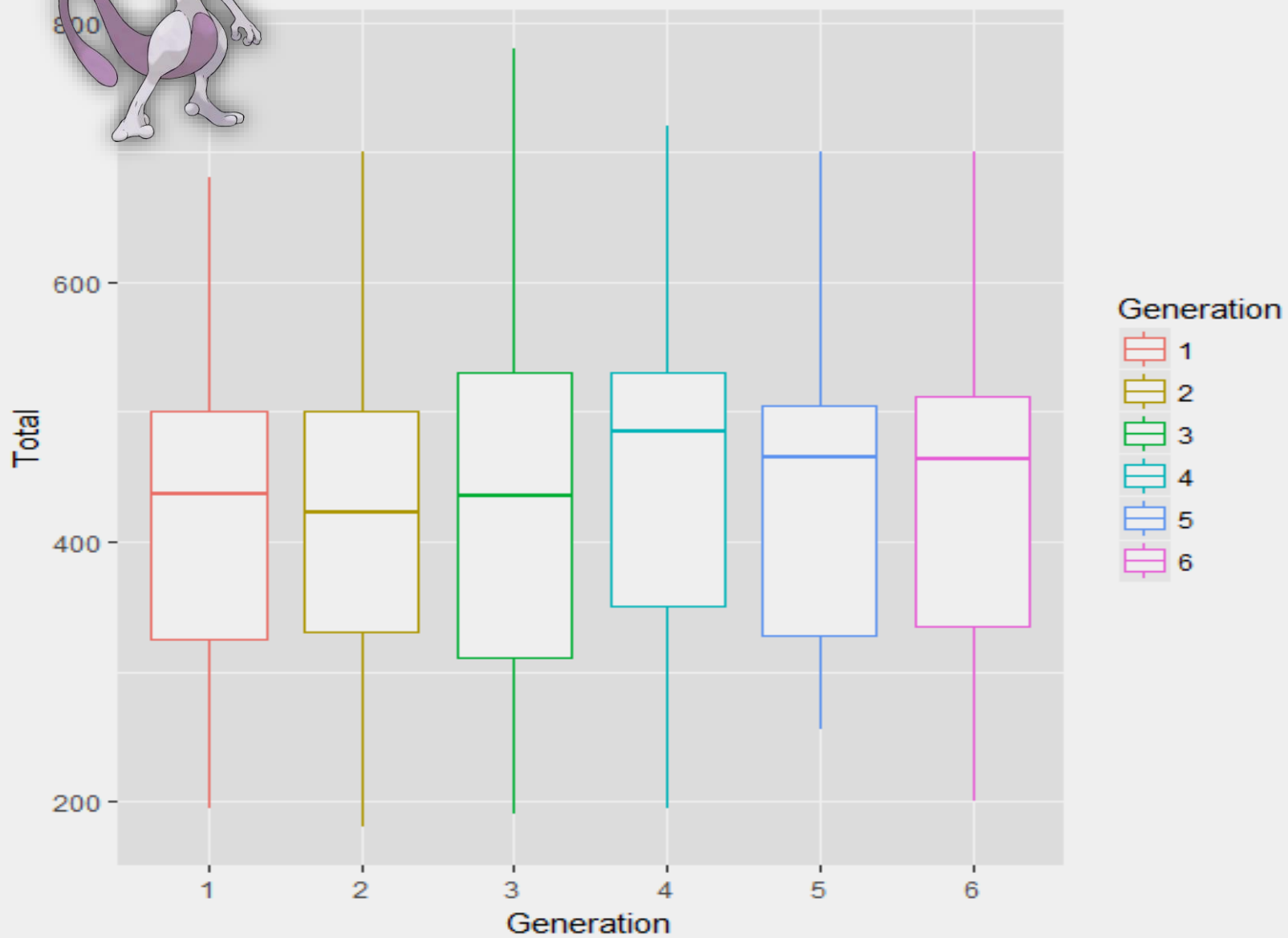
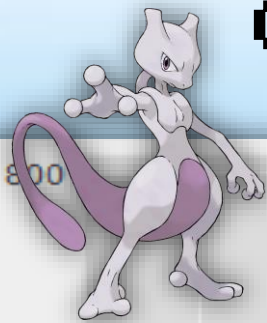




# Geracao x Total

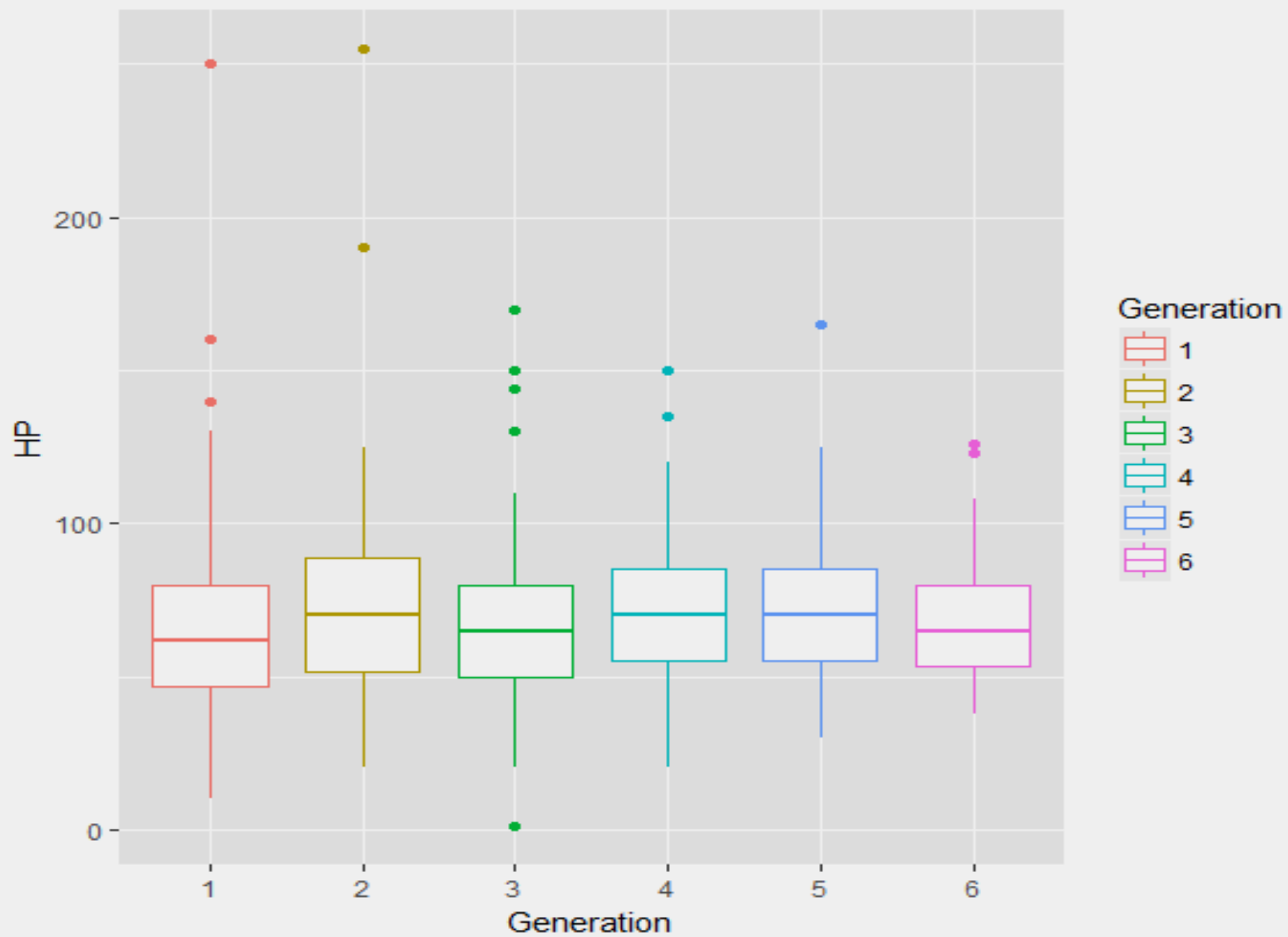


# Geracao x Total

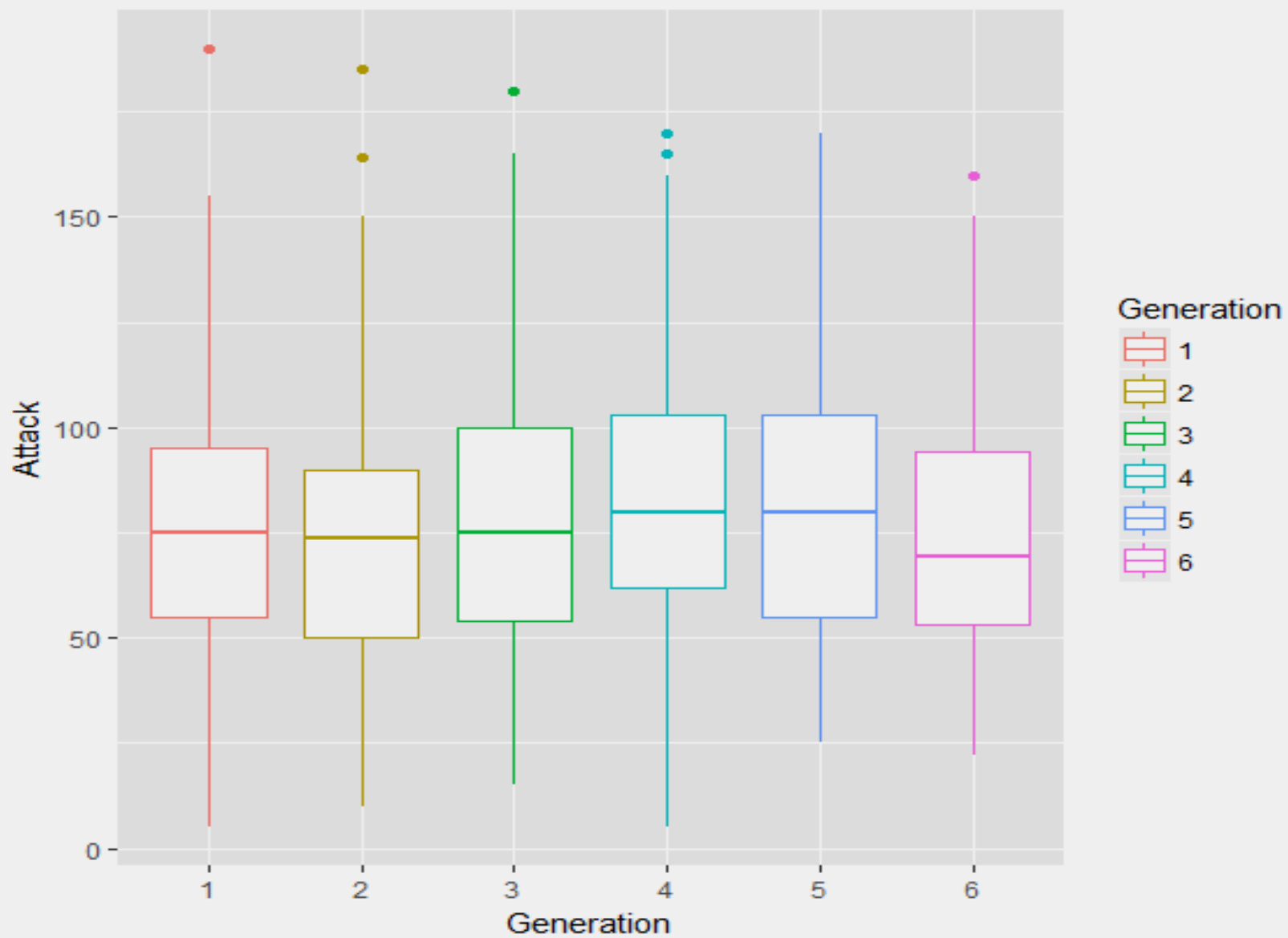




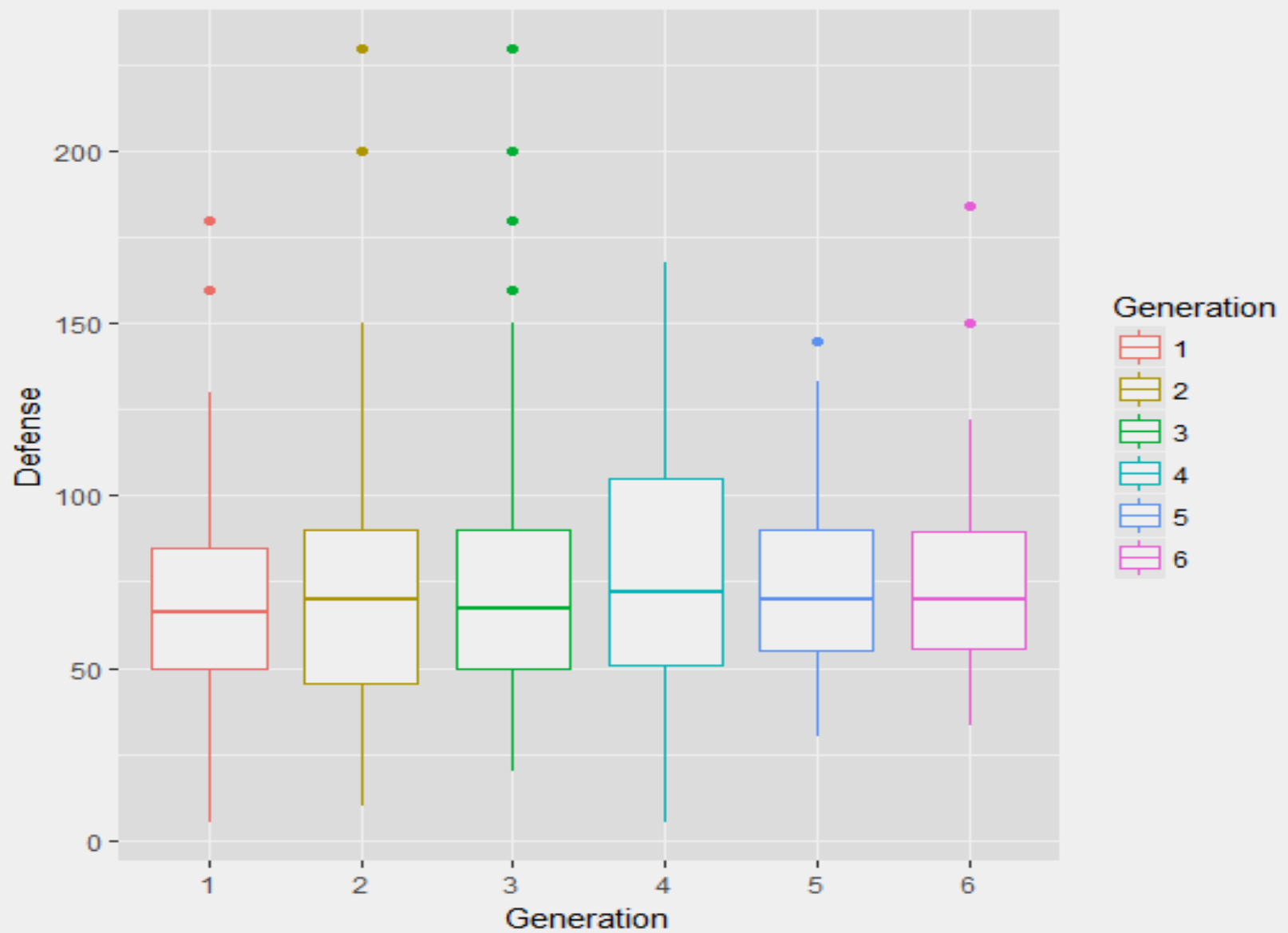
# Geracao x HP



# Geracao x Ataque

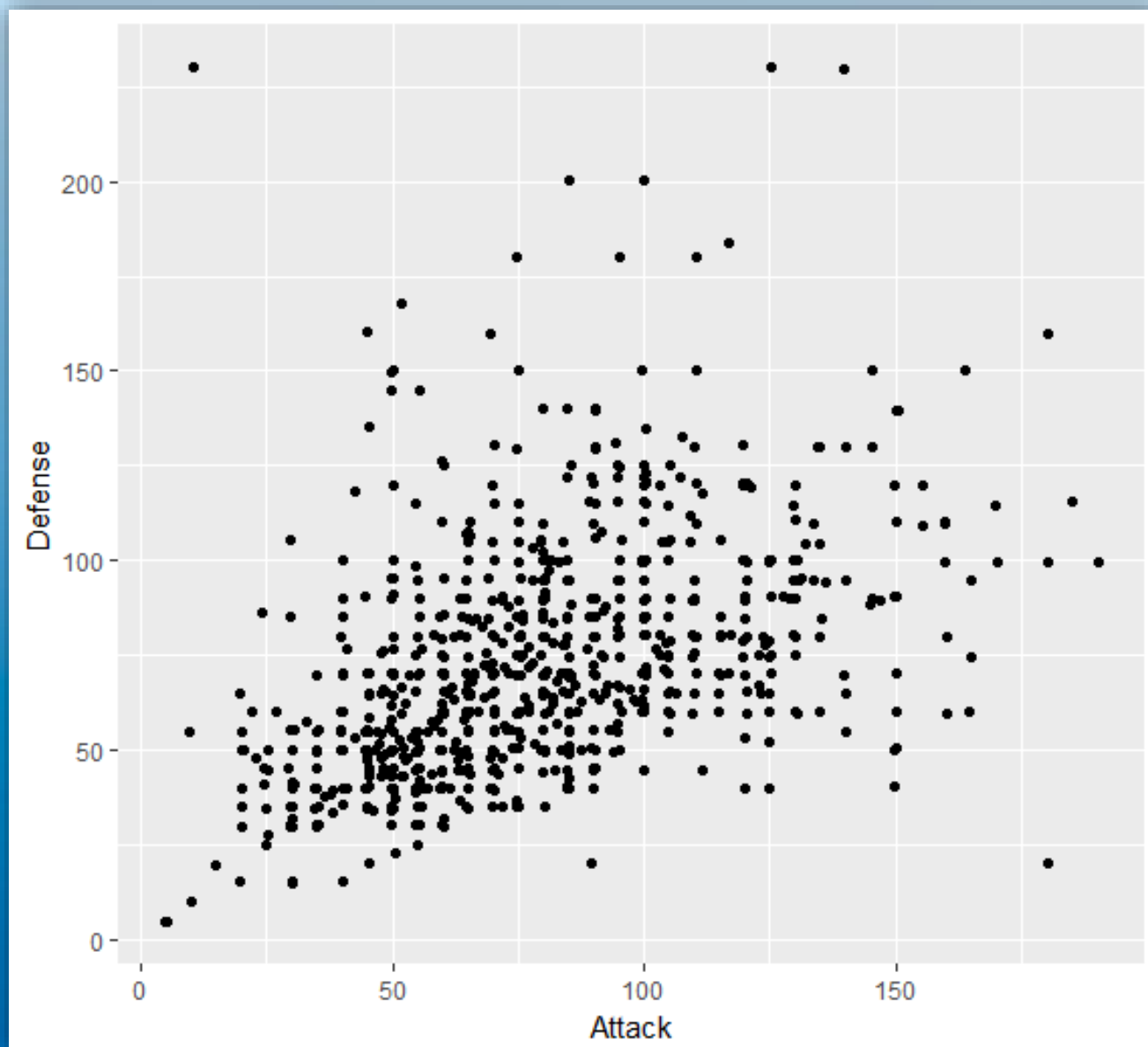


# Geracao x Defesa

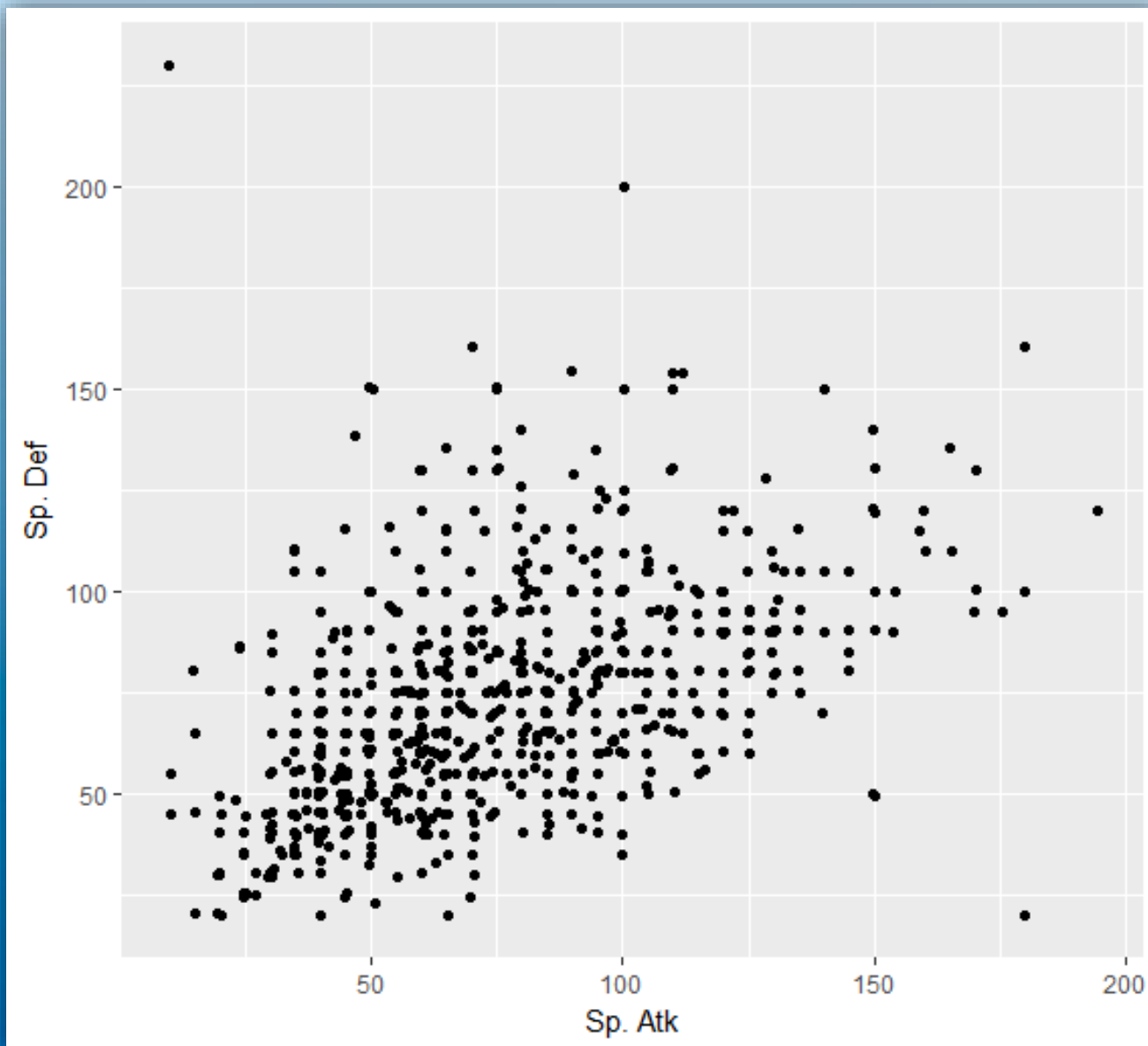


[illegible]

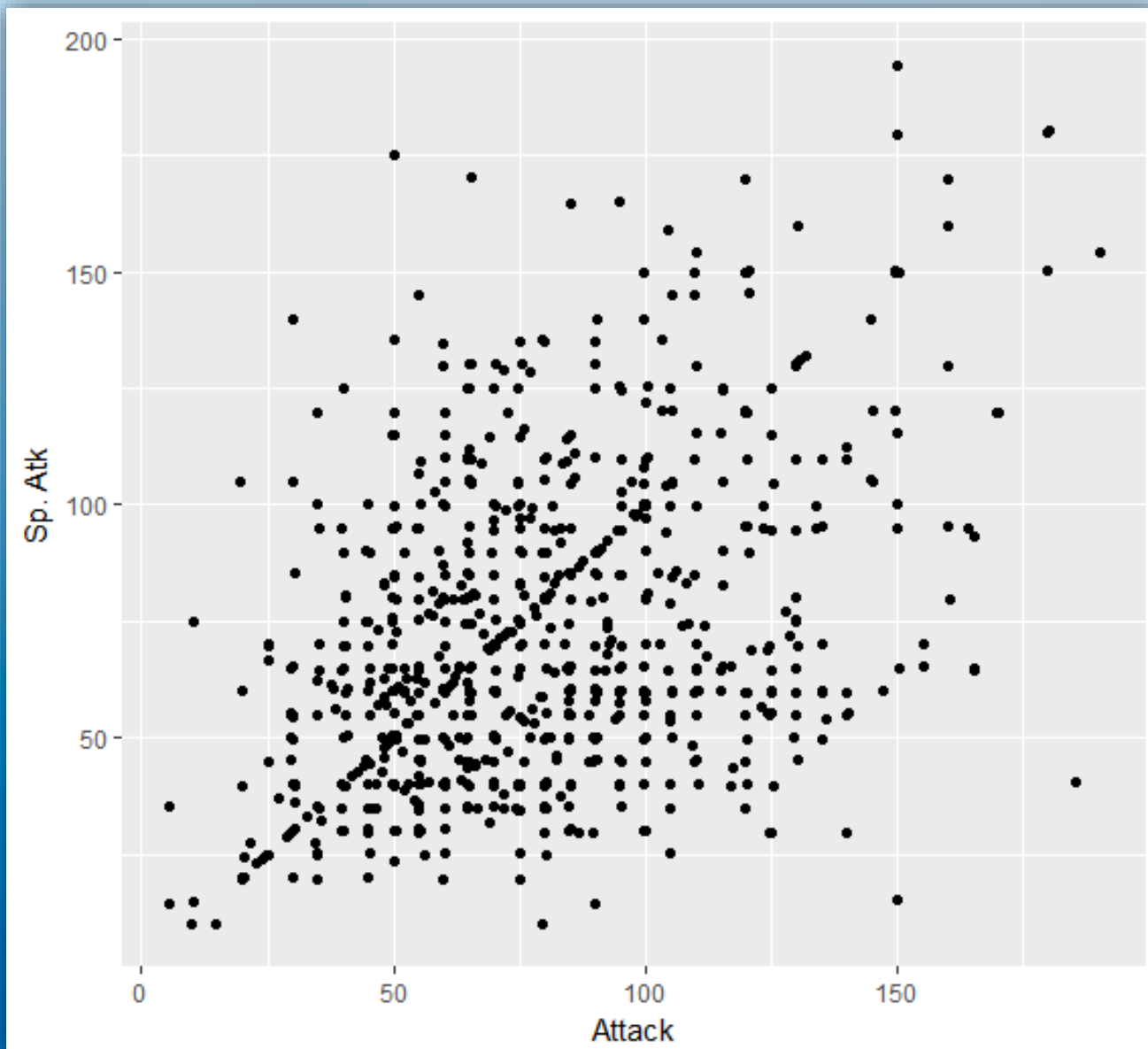
# Ataque x Defesa



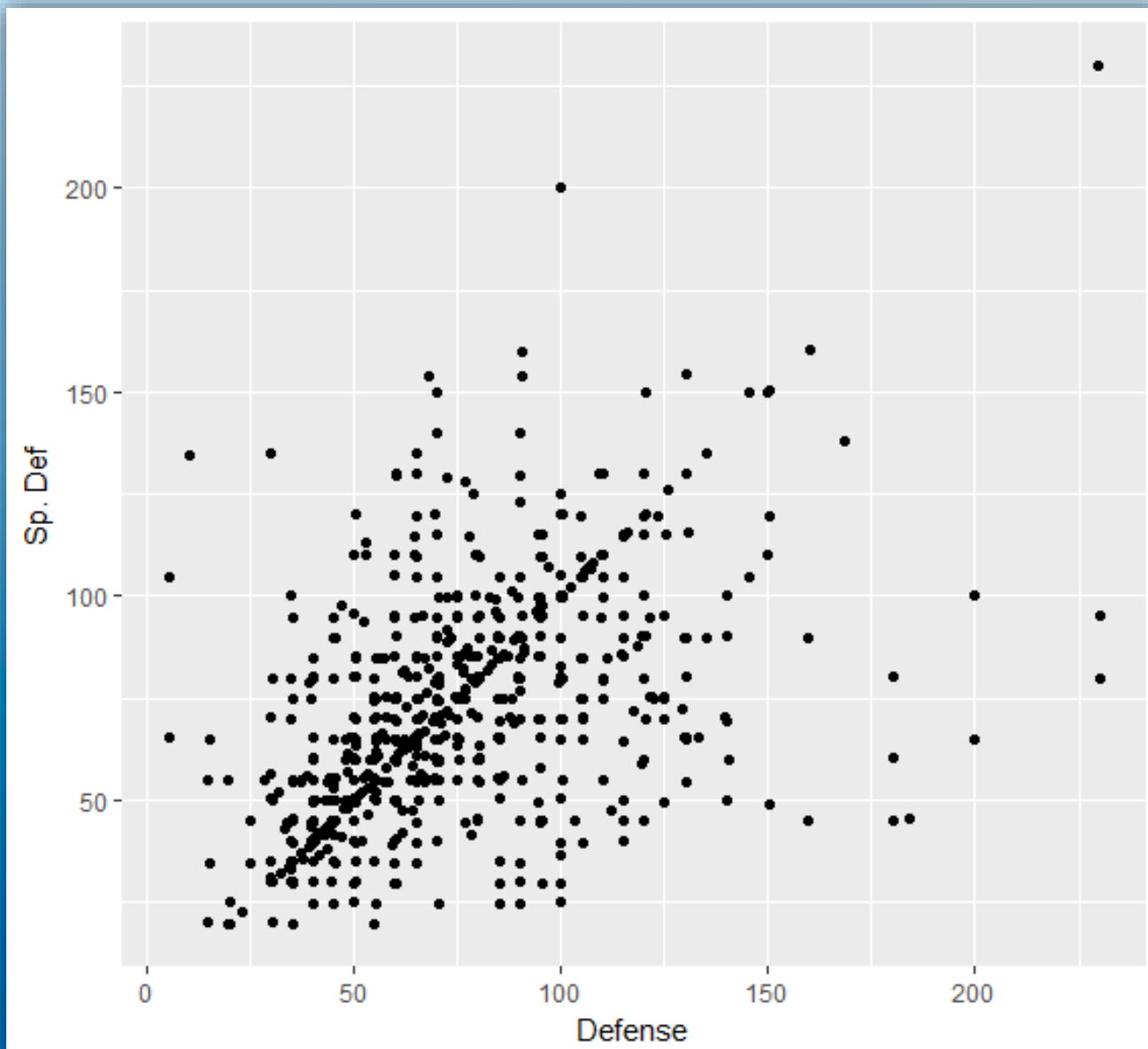
# Ataque Especial x Defesa Especial



# Ataque x Ataque Especial

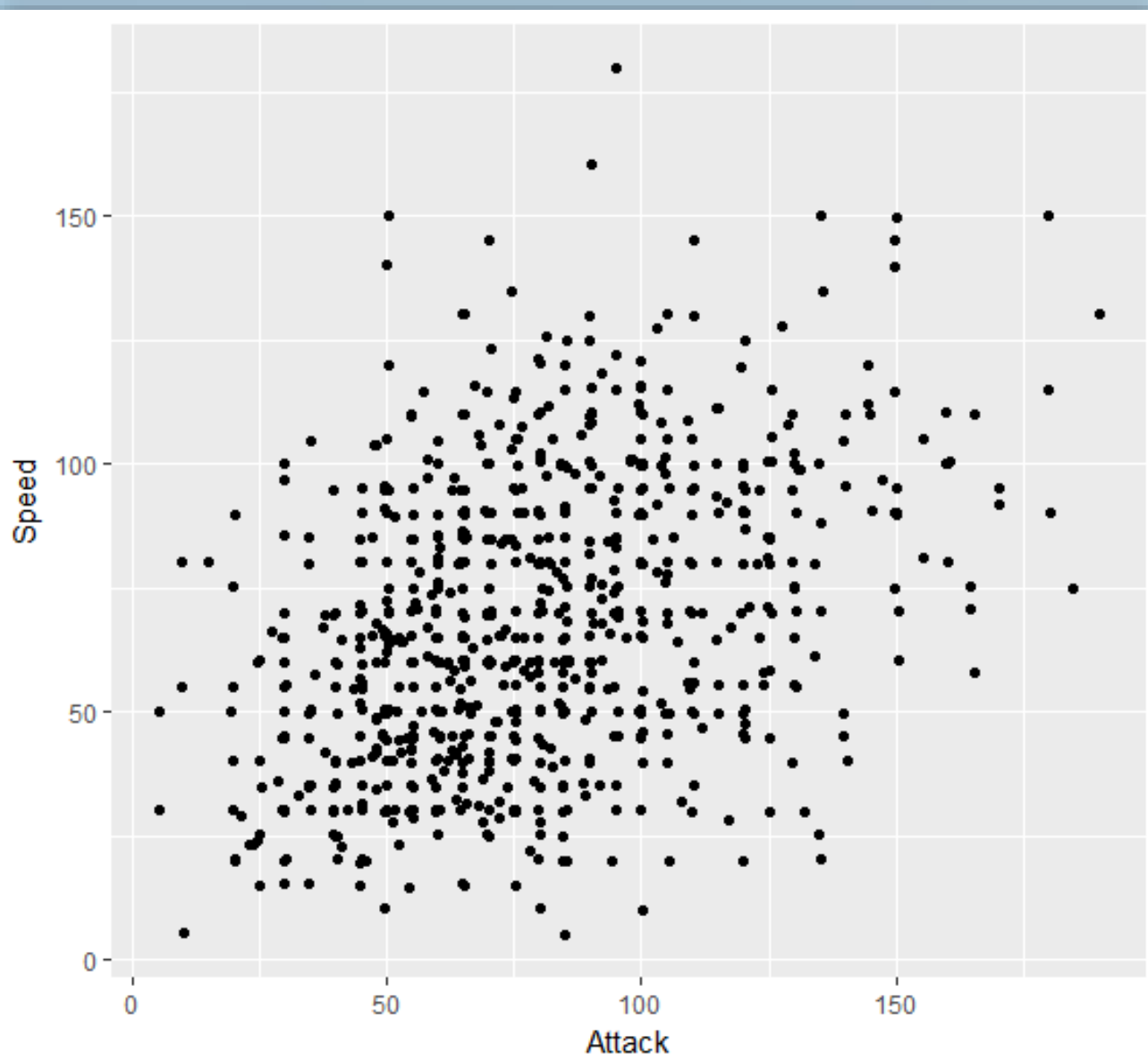


# Defesa x Defesa Especial

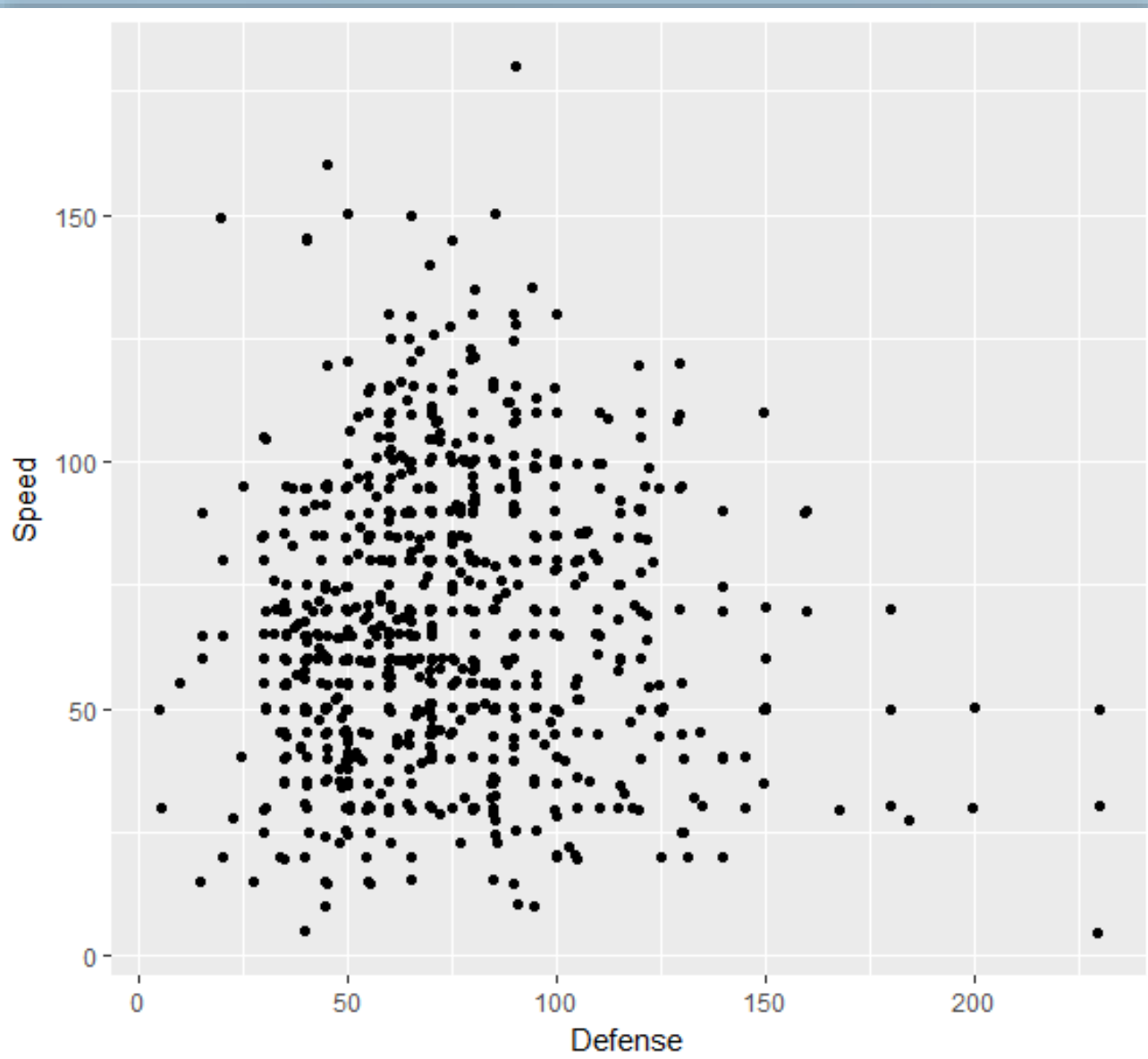




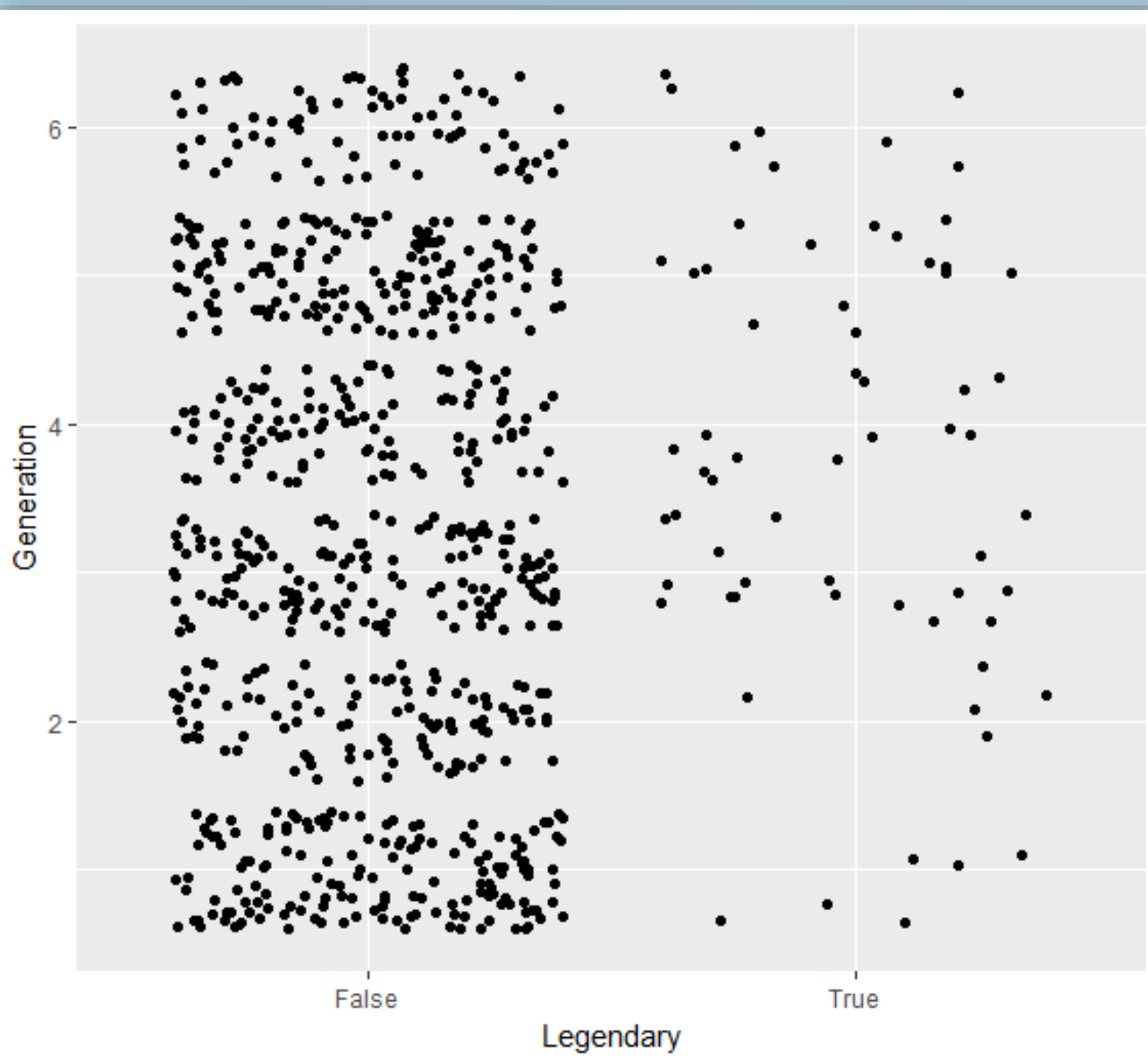
# Ataque x Velocidade



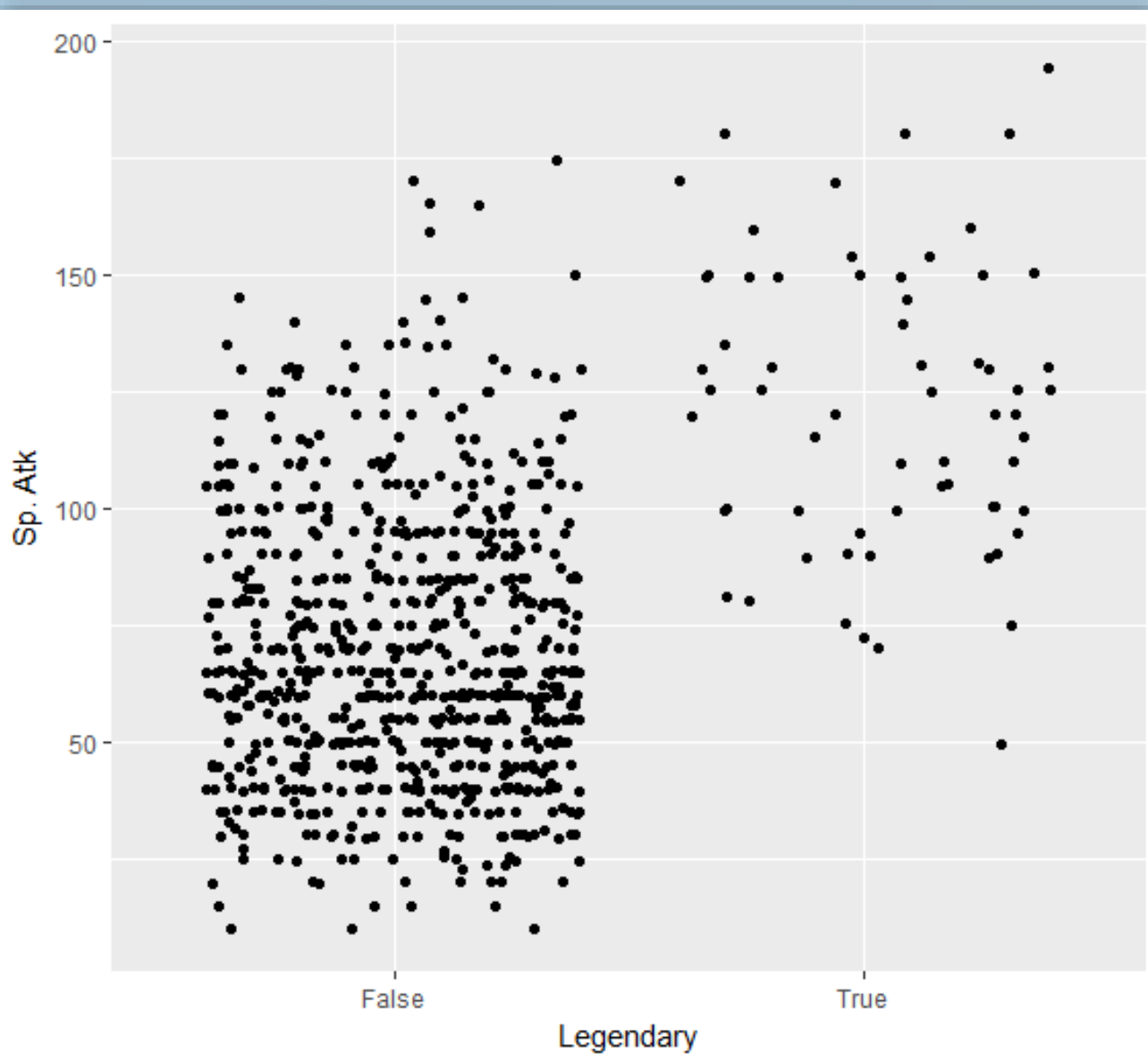
# Defesa x Velocidade



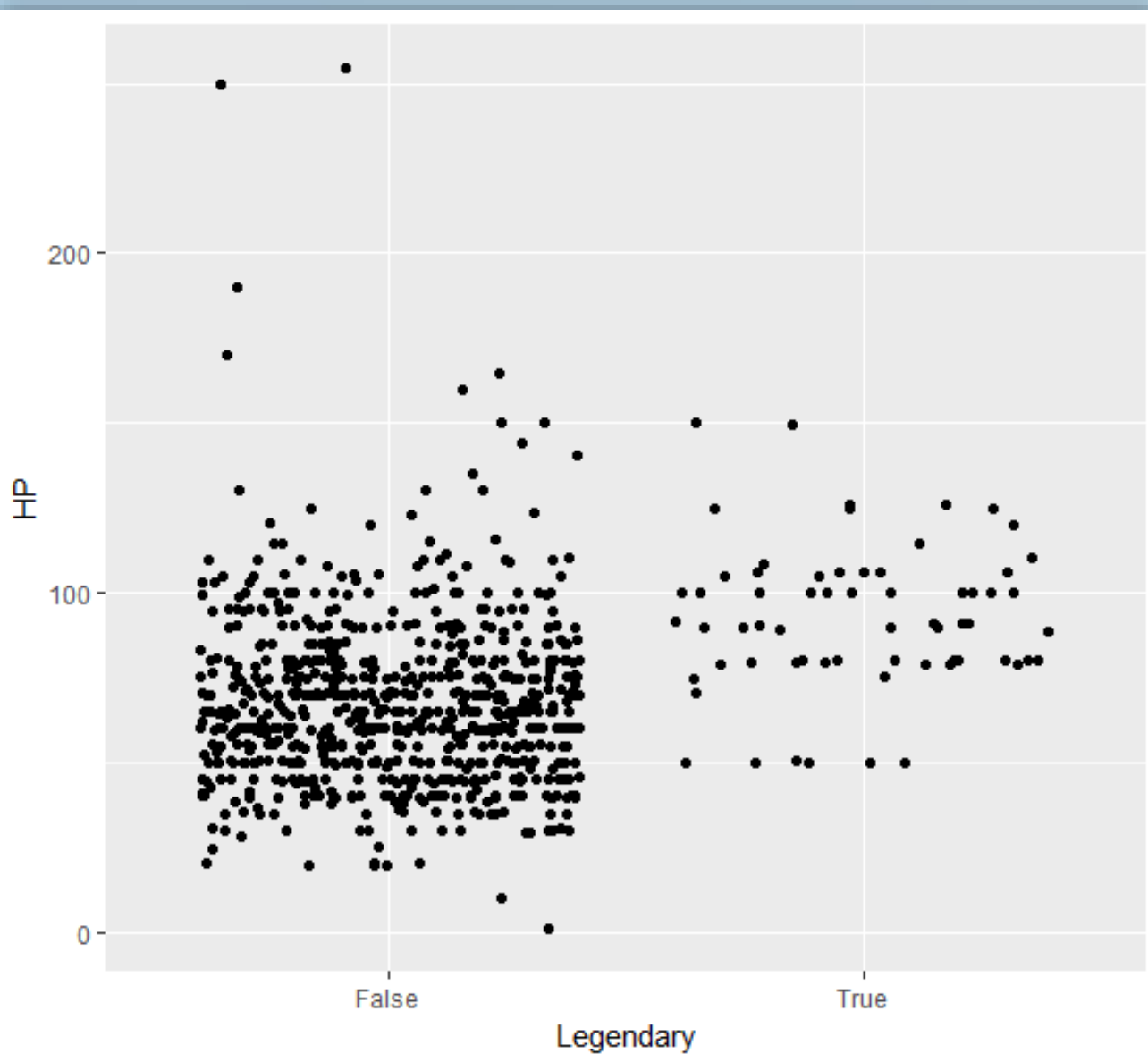
# Lendarios x Geracao



# Lendarios x Ataque



# Lendarios x HP



# Próximos Passos

- Estabelecer relações entre pokémon de tipos diferentes.
- Verificar se o ataque e a defesa influenciam na quantidade de pontos de vida.
- Será que existe algum atributo em cada geração que se destaca em relação aos outros?

# Dúvidas?



# Obrigado!



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