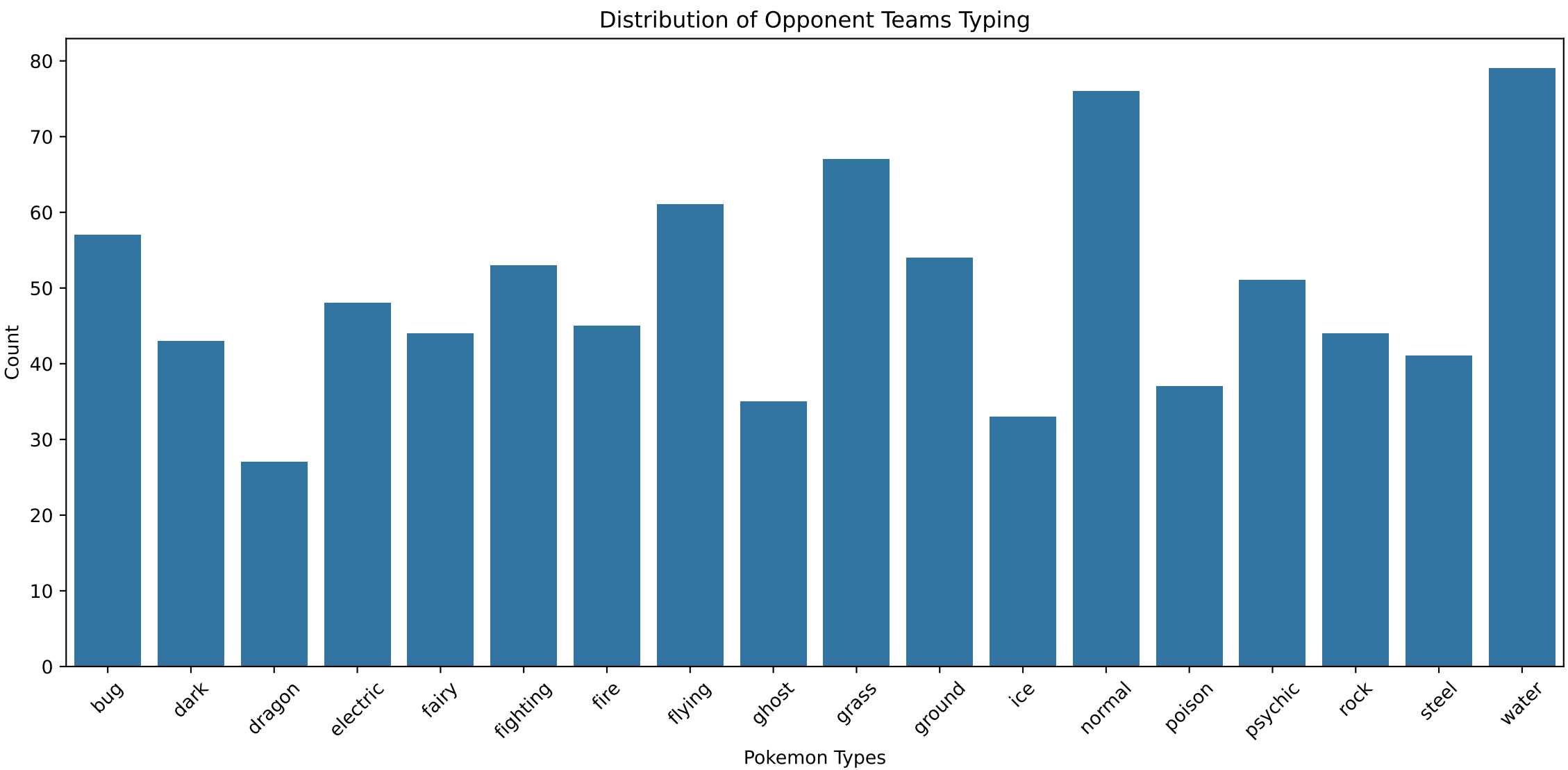
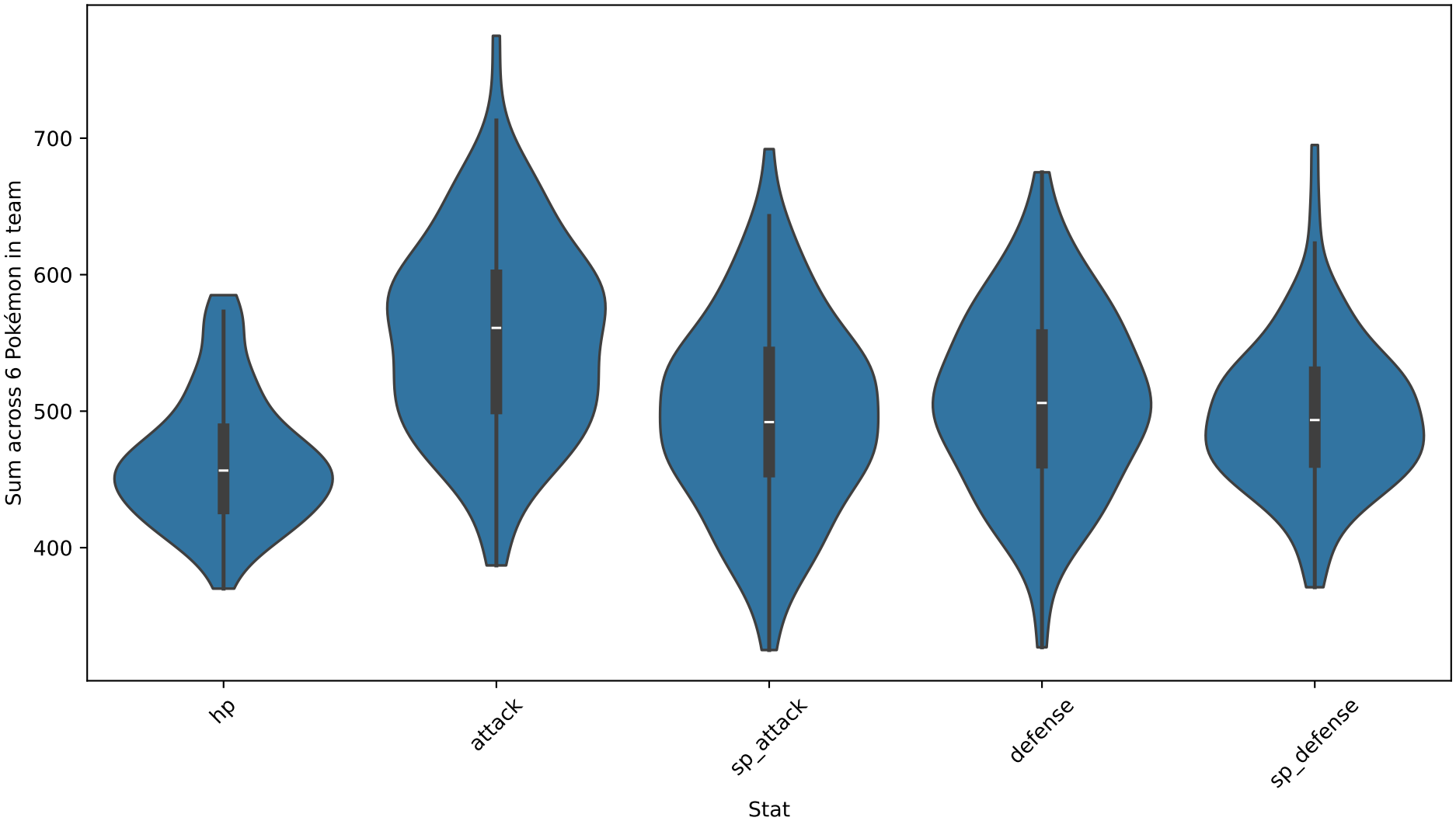
Evolutionary Algorithm - Mutation Rate Experiment

Setup:

- Population size: 5
- Generations: 20
- Mutation rate: 0.3
- Elite size: 1
- Tournament size: 3


Distribution of Opponent Teams Typing
Count
0
10
20
30
40
50
60
70
80
bug
dark
dragon
electric
fairy
fighting
fire
flying
ghost
grass
ground
ice
normal
poison
psychic
rock
steel
water
Pokemon Types


Opponents: distribution of team stat sums
Sum across 6 Pokémon in team
700
600
500
400
hp
attack
sp_attack
defense
sp_defense
Stat

EA - Results of individual runs

run	solver	elite_size	fitness	stats_sum	pokemons
0	EA	1	0.28139158576051776	2230	PokemonTeam(size=6, names=['Incineroar', 'Alomomola', 'Garchomp', 'Glalie', 'Kangaskhan', 'Skarmory'])
1	EA	1	0.26588235294117646	2233	PokemonTeam(size=6, names=['Blaziken', 'Sceptile', 'Donphan', 'Crustle', 'Meowstic', 'Snorlax'])
2	EA	1	0.21749532710280373	2202	PokemonTeam(size=6, names=['Watchog', 'Sylveon', 'Abomasnow', 'Swampert', 'Passimian', 'Solrock'])
3	EA	1	0.21460377358490565	2447	PokemonTeam(size=6, names=['Hydreigon', 'Steelix', 'Dhelmise', 'Lapras', 'Gallade', 'Bouffalant'])
4	EA	1	0.368594674556213	2293	PokemonTeam(size=6, names=['Durant', 'Blissey', 'Tyranitar', 'Hippowdon', 'Venusaur', 'Magmortar'])
5	EA	1	0.2757119741100324	2118	PokemonTeam(size=6, names=['Chesnaught', 'Torkoal', 'Excadrill', 'Azumarill', 'Snorlax', 'Goodra'])

EA - Summary statistics

solver	mean	median	std	min	max	count
EA	0.270613	0.270797	0.056078	0.214604	0.368595	6