

Results Summary from GeneEvolve Simulation 2023-11-22 13:37:21.517474

Basic Parameters:

Output Dir: /Users/matthewkeller/GoogleCloud/DriveDocuments/RESEARCH/GeneEvolve/GeneEvolve-ETFD/NEWEST.GE75_ETFD-trial/GE.Output

Number of generations: 7

Population size at start: 1000

Number of genes: 10

Components going into Phenotype: A, F, S, U

Components going into Parenting Phenotype: F, S, U

Components going into Mating Phenotype: F, S, U ; spousal corr on this phenotype = 0.3

Sample Sizes in ETFD Dataset:

MZ	DZ	Parents of Twins	Sibs of Twins	Spouses of Twins	Children of Twins
146	227	197	235	287	316

Variance Components & Paths, User Input:

(Note: $U+MZ+TW=E$ for non-twins; m & p = maternal & paternal VT paths)

A	AA	D	F	m	p	S	U	MZ	TW	SEX	AGE	A.by.SEX	A.by.AGE
0.4	0	0	0.15	0.447	0.224	0.15	0.3	0	0	0	0	0	0

Time

Simulation started: 2023-11-22 13:37:16.506429

Simulation ended: 2023-11-22 13:37:22.007761

Minutes taken – looping through generations: 0.08

Minutes taken – creating pedigree datasets: 0.04

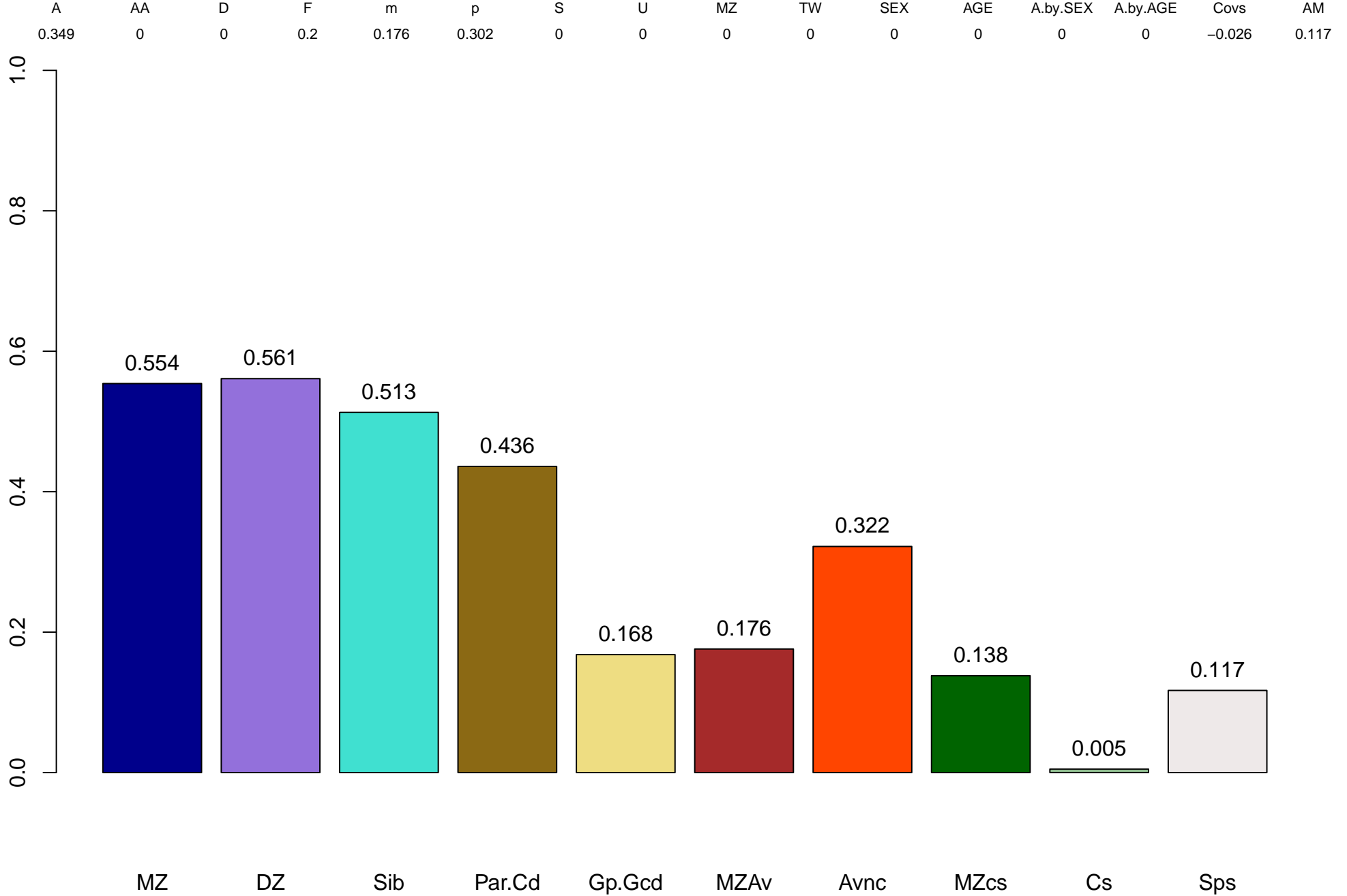
Minutes taken – finding relative correlations: 0

Minutes taken – TOTAL: 0.09

Warnings in script:

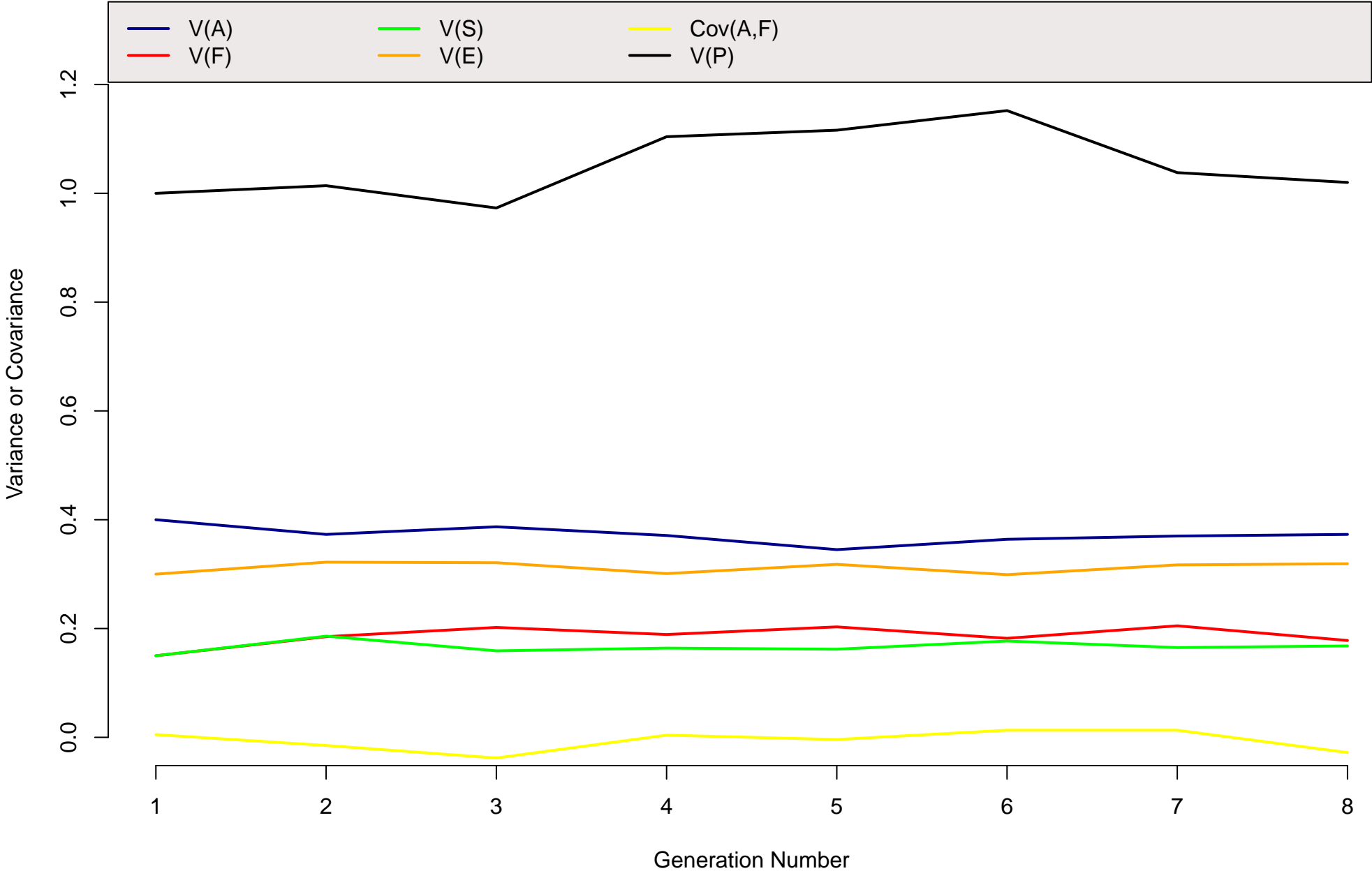
Correlations between 10 Relative Types

True Standardized Variance Components in Dataset



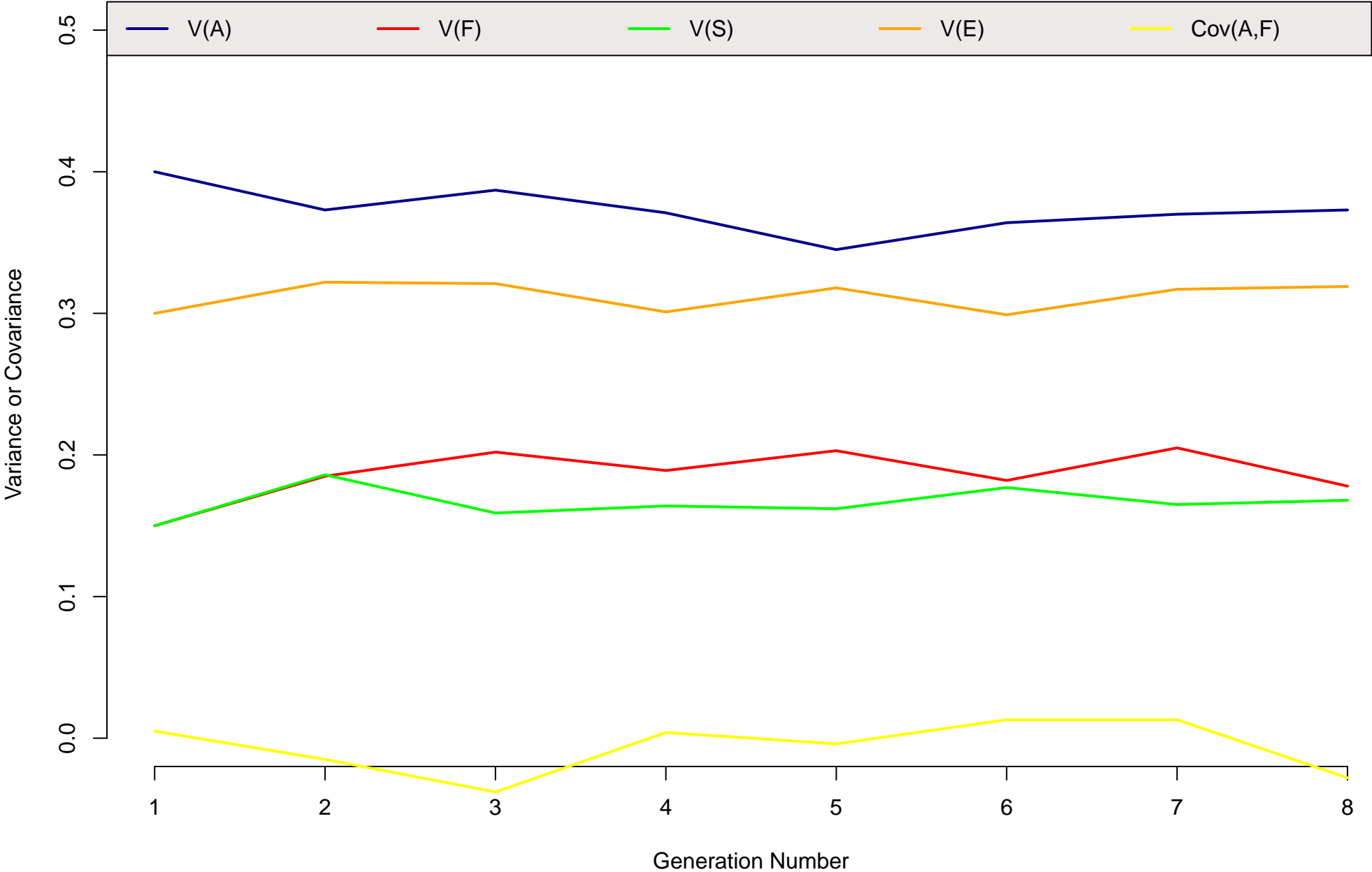
Change in Variance Across Generations – Includes V(P)

	Unstandardized Variance Components														
	V(A)	V(AA)	V(D)	V(F)	V(S)	V(E)	V(Sex)	V(Age)	V(AxSex)	V(AxAge)	V(AxS)	V(AxU)	Cov(A,F)	V(P)	r(sps)
Start:	0.4	0	0	0.15	0.15	0.3	0	0	0	0	0	0	0.005	1	0.18
End:	0.373	0	0	0.178	0.168	0.319	0	0	0	0	0	0	-0.028	1.02	0.168
Data:	0.344	0	0	0.197	0.174	0.298	0	0	0	0	0	0	-0.006	0.986	0.117



Change in Variance Across Generations – Does Not Include V(P)

	Unstandardized Variance Components													
	V(A)	V(AA)	V(D)	V(F)	V(S)	V(E)	V(Sex)	V(Age)	V(AxSex)	V(AxAge)	V(AxS)	V(AxU)	Cov(A,F)	r(sps)
Start:	0.4	0	0	0.15	0.15	0.3	0	0	0	0	0	0	0.005	0.18
End:	0.373	0	0	0.178	0.168	0.319	0	0	0	0	0	0	-0.028	0.168
Data:	0.344	0	0	0.197	0.174	0.298	0	0	0	0	0	0	-0.006	0.117



Change in V(A) Across Generations due to Assortative Mating

	Unstandardized Variance Components														
	V(A)	V(AA)	V(D)	V(F)	V(S)	V(E)	V(Sex)	V(Age)	V(AxSex)	V(AxAge)	V(AxS)	V(AxU)	Cov(A,F)	V(P)	r(sps)
Start:	0.4	0	0	0.15	0.15	0.3	0	0	0	0	0	0	0.005	1	0.18
End:	0.373	0	0	0.178	0.168	0.319	0	0	0	0	0	0	-0.028	1.02	0.168

